

Appendix B

Preferred Alternative C

- (1) Existing 2019 PM Peak Turning Movements**
- (2) Existing 2019 PM Peak Level of Service**
- (3) No Build 2045 Turning Movements**
- (4) No Build 2045 PM Peak Level of Service**
- (5) Build 2045 Turning Movements**
- (6) Build 2045 PM Peak Level of Service**
- (7) Typical Roadway and Bridge Sections**
- (8) Miscellaneous Support Information**
- (9) Plan Profile Sheets**
- (10) Preferred Alternative C Figure**
- (11) Project Cost Estimate**
 - a. Summary Sheet**
 - b. Project Cost Estimate Sheets**
- (12) Gulf Regional Planning Commission Traffic Model - 2025 No Build**
- (13) Gulf Regional Planning Commission Traffic Model - 2025 Build**
- (14) Gulf Regional Planning Commission Traffic Model - 2045 No Build**
- (15) Gulf Regional Planning Commission Traffic Model - 2045 Build**
- (16) City of Gulfport Erosion, Sediment, & Post-Construction Stormwater Control Ordinance**

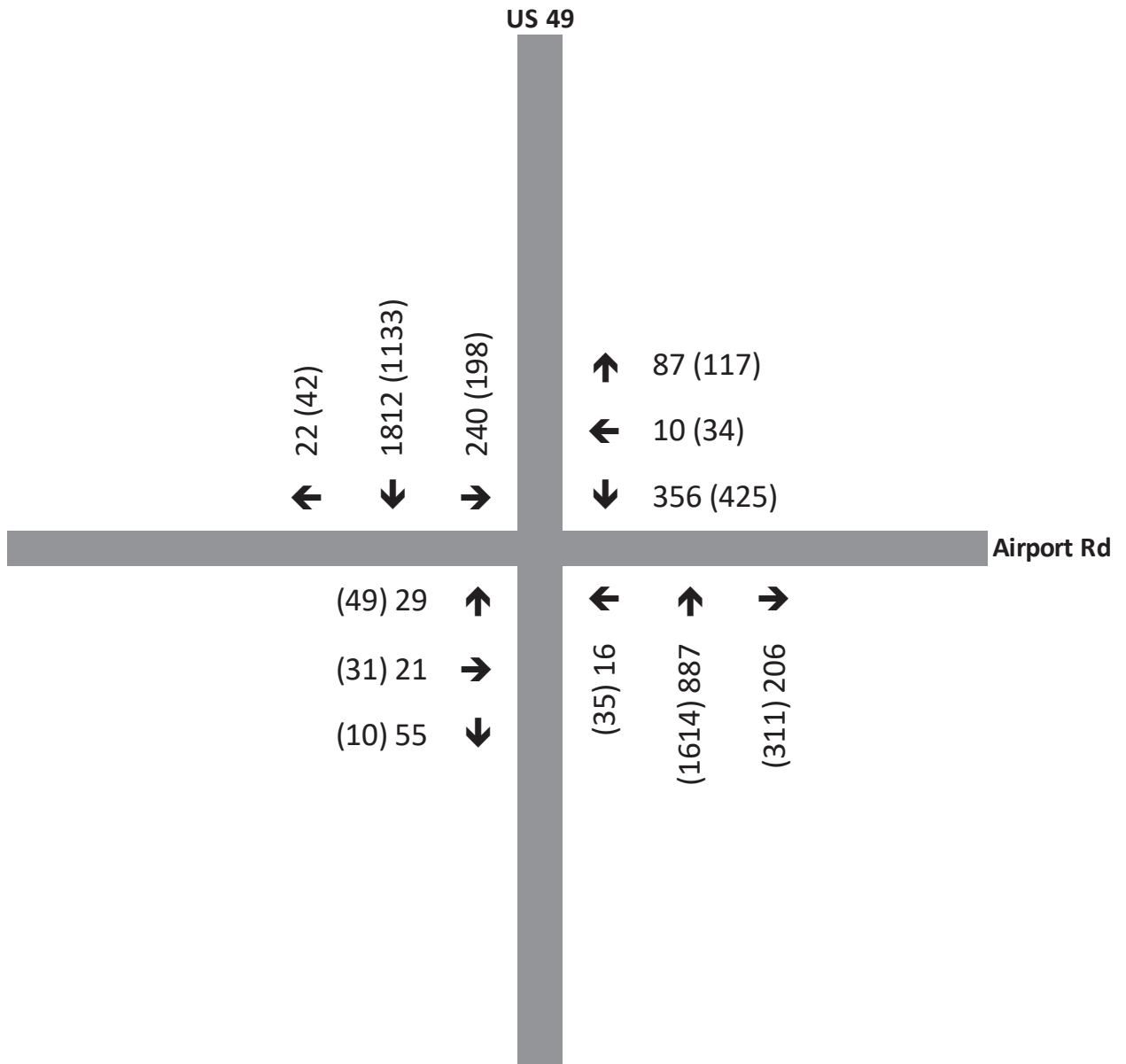
Appendix B

Existing 2019 PM Peak Turning Movements



Legend

AM (PM)



Appendix B

Existing 2019 PM Level of Service

HCM 6th Signalized Intersection Summary

3: US Hwy 49 & Poole St/Airport Rd

PM-Pk-2019.syn

03/04/2020

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	49	31	10	425	34	117	35	1614	311	198	1133	42
Future Volume (veh/h)	49	31	10	425	34	117	35	1614	311	198	1133	42
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	52	33	0	473	0	0	37	1699	0	208	1193	44
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	70	45		565	0		56	2377		245	2889	107
Arrive On Green	0.06	0.06	0.00	0.16	0.00	0.00	0.03	0.47	0.00	0.14	0.57	0.57
Sat Flow, veh/h	1110	705	1585	3563	0	1585	1781	5106	1585	1781	5055	186
Grp Volume(v), veh/h	85	0	0	473	0	0	37	1699	0	208	803	434
Grp Sat Flow(s),veh/h/ln	1815	0	1585	1781	0	1585	1781	1702	1585	1781	1702	1837
Q Serve(g_s), s	4.7	0.0	0.0	13.3	0.0	0.0	2.1	27.5	0.0	11.7	13.6	13.6
Cycle Q Clear(g_c), s	4.7	0.0	0.0	13.3	0.0	0.0	2.1	27.5	0.0	11.7	13.6	13.6
Prop In Lane	0.61		1.00	1.00		1.00	1.00		1.00	1.00		0.10
Lane Grp Cap(c), veh/h	115	0		565	0		56	2377		245	1946	1050
V/C Ratio(X)	0.74	0.00		0.84	0.00		0.66	0.71		0.85	0.41	0.41
Avail Cap(c_a), veh/h	625	0		778	0		88	2377		475	1946	1050
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	47.4	0.0	0.0	42.1	0.0	0.0	49.3	22.1	0.0	43.4	12.4	12.4
Incr Delay (d2), s/veh	8.9	0.0	0.0	5.8	0.0	0.0	12.1	1.9	0.0	7.9	0.6	1.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.4	0.0	0.0	6.2	0.0	0.0	1.1	10.9	0.0	5.7	5.1	5.7
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	56.3	0.0	0.0	47.9	0.0	0.0	61.5	23.9	0.0	51.3	13.0	13.6
LnGrp LOS	E	A		D	A		E	C		D	B	B
Approach Vol, veh/h		85	A		473	A		1736	A		1445	
Approach Delay, s/veh		56.3			47.9			24.7			18.7	
Approach LOS		E			D			C			B	
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	18.7	52.5		11.0	7.8	63.4		20.9				
Change Period (Y+Rc), s	4.5	4.5		4.5	4.5	4.5		4.5				
Max Green Setting (Gmax), s	27.5	36.5		35.5	5.1	58.9		22.5				
Max Q Clear Time (g_c+I1), s	13.7	29.5		6.7	4.1	15.6		15.3				
Green Ext Time (p_c), s	0.5	5.5		0.4	0.0	11.3		1.1				

Intersection Summary

HCM 6th Ctrl Delay	26.0
HCM 6th LOS	C

Notes

User approved volume balancing among the lanes for turning movement.

Unsignalized Delay for [NBR, EBR, WBR] is excluded from calculations of the approach delay and intersection delay.

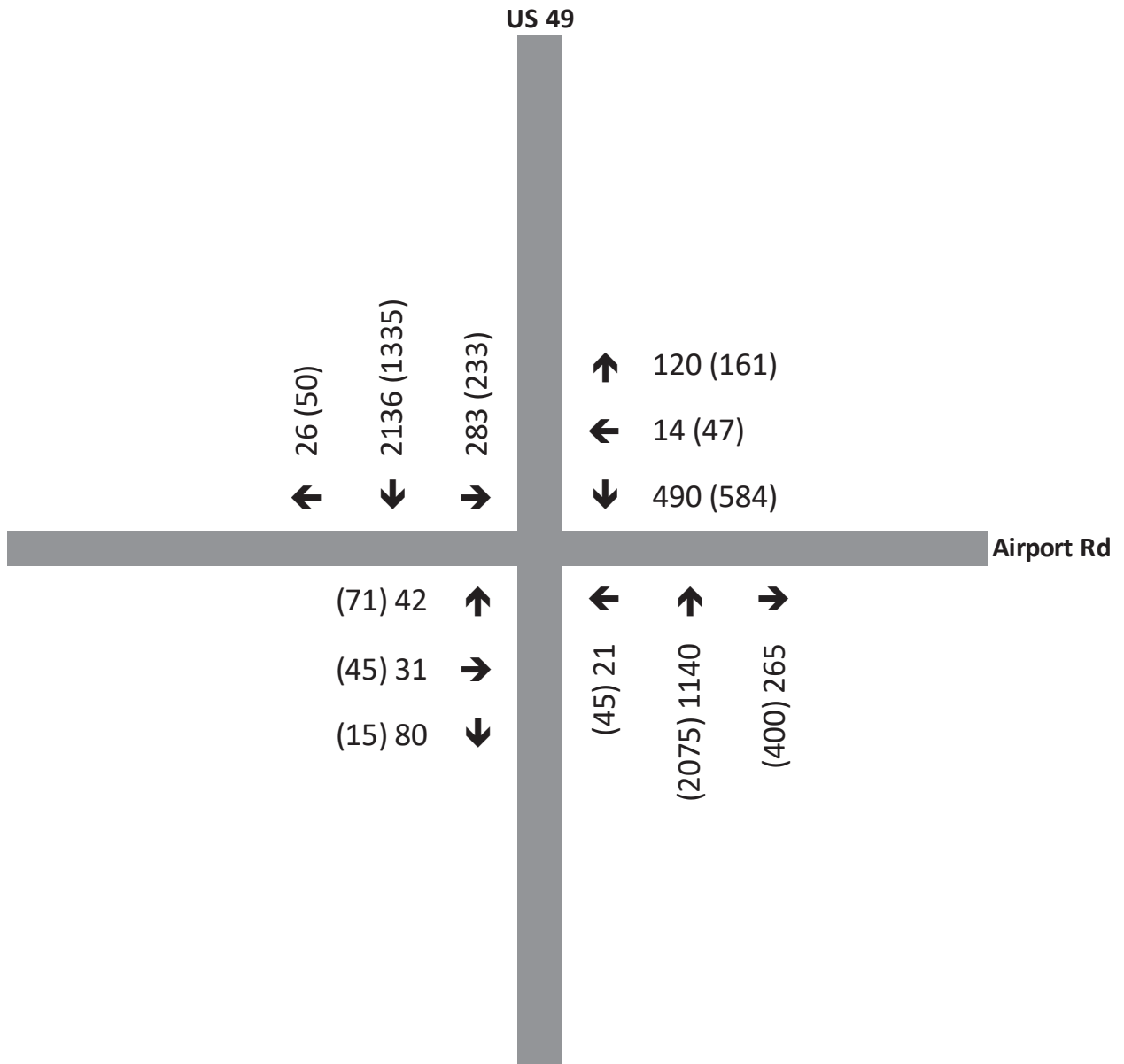
Appendix B

No Build 2045 Turning Movements



Legend

AM (PM)



Appendix B

No Build 2045 Peak PM Level of Service

HCM 6th Signalized Intersection Summary

3: US Hwy 49 & Poole St/Airport Rd

2045 No Build - PM Peak.syn

11/18/2020

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	71	45	15	584	47	161	45	2075	400	233	1335	50
Future Volume (veh/h)	71	45	15	584	47	161	45	2075	400	233	1335	50
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	75	47	0	615	49	0	47	2184	0	245	1405	53
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	93	58		261	274		61	2501		271	3066	116
Arrive On Green	0.08	0.08	0.00	0.15	0.15	0.00	0.03	0.49	0.00	0.15	0.61	0.61
Sat Flow, veh/h	1116	699	1585	1781	1870	1585	1781	5106	1585	1781	5050	190
Grp Volume(v), veh/h	122	0	0	615	49	0	47	2184	0	245	947	511
Grp Sat Flow(s),veh/h/ln	1815	0	1585	1781	1870	1585	1781	1702	1585	1781	1702	1836
Q Serve(g_s), s	9.3	0.0	0.0	20.5	3.2	0.0	3.7	53.4	0.0	18.9	21.2	21.2
Cycle Q Clear(g_c), s	9.3	0.0	0.0	20.5	3.2	0.0	3.7	53.4	0.0	18.9	21.2	21.2
Prop In Lane	0.61		1.00	1.00		1.00	1.00		1.00	1.00		0.10
Lane Grp Cap(c), veh/h	151	0		261	274		61	2501		271	2067	1115
V/C Ratio(X)	0.81	0.00		2.36	0.18		0.76	0.87		0.90	0.46	0.46
Avail Cap(c_a), veh/h	356	0		261	274		324	2501		324	2067	1115
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	63.1	0.0	0.0	59.8	52.4	0.0	67.0	31.8	0.0	58.4	15.0	15.0
Incr Delay (d2), s/veh	9.7	0.0	0.0	622.8	0.3	0.0	17.6	4.6	0.0	24.7	0.7	1.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	4.7	0.0	0.0	54.4	1.5	0.0	1.9	21.8	0.0	10.2	7.9	8.7
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	72.8	0.0	0.0	682.5	52.7	0.0	84.6	36.4	0.0	83.0	15.7	16.3
LnGrp LOS	E	A		F	D		F	D		F	B	B
Approach Vol, veh/h		122	A		664	A		2231	A		1703	
Approach Delay, s/veh		72.8			636.1			37.5			25.6	
Approach LOS		E			F			D			C	
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	25.8	73.1		16.2	9.3	89.5		25.0				
Change Period (Y+Rc), s	4.5	4.5		4.5	4.5	4.5		4.5				
Max Green Setting (Gmax), s	25.5	48.5		27.5	25.5	48.5		20.5				
Max Q Clear Time (g_c+I1), s	20.9	55.4		11.3	5.7	23.2		22.5				
Green Ext Time (p_c), s	0.4	0.0		0.5	0.1	10.5		0.0				

Intersection Summary

HCM 6th Ctrl Delay 118.3

HCM 6th LOS F

Notes

Unsignalized Delay for [NBR, EBR, WBR] is excluded from calculations of the approach delay and intersection delay.

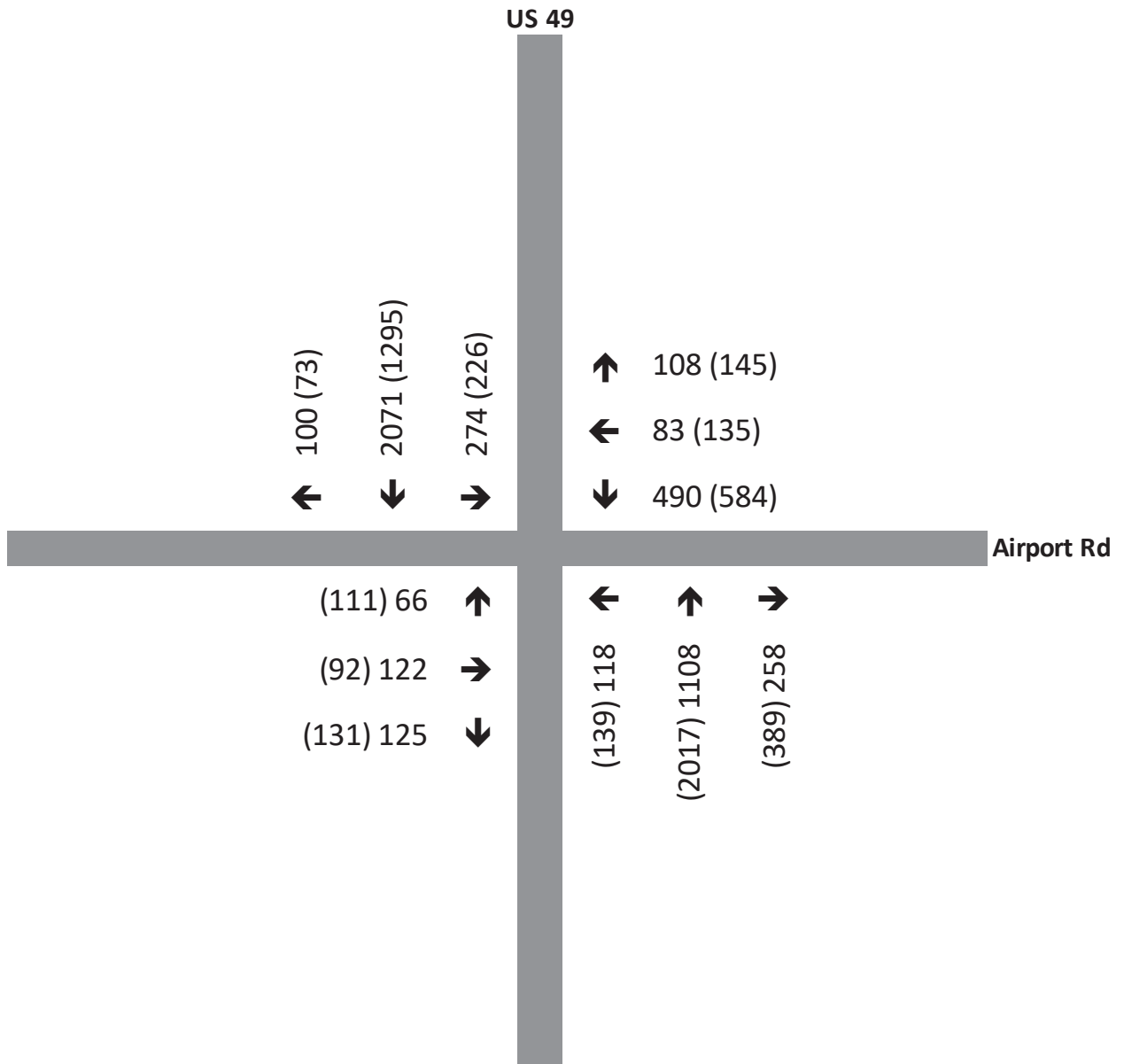
Appendix B

Build 2045 Turning Movements



Legend

AM (PM)



Appendix B

Build 2045 PM Peak Level of Service

HCM 6th Signalized Intersection Summary

3: US Hwy 49 & Poole St/Airport Rd

2045 Build - PM Peak.syn

11/18/2020

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	111	92	131	584	135	145	139	2017	389	226	1295	73
Future Volume (veh/h)	111	92	131	584	135	145	139	2017	389	226	1295	73
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	117	97	0	615	142	0	146	2123	0	238	1363	77
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	134	111		261	274		173	2256		264	2438	138
Arrive On Green	0.13	0.13	0.00	0.15	0.15	0.00	0.10	0.44	0.00	0.15	0.49	0.49
Sat Flow, veh/h	995	825	1585	1781	1870	1585	1781	5106	1585	1781	4945	279
Grp Volume(v), veh/h	214	0	0	615	142	0	146	2123	0	238	938	502
Grp Sat Flow(s),veh/h/ln	1821	0	1585	1781	1870	1585	1781	1702	1585	1781	1702	1820
Q Serve(g_s), s	16.1	0.0	0.0	20.5	9.8	0.0	11.3	55.6	0.0	18.4	27.0	27.0
Cycle Q Clear(g_c), s	16.1	0.0	0.0	20.5	9.8	0.0	11.3	55.6	0.0	18.4	27.0	27.0
Prop In Lane	0.55		1.00	1.00		1.00	1.00		1.00	1.00		0.15
Lane Grp Cap(c), veh/h	246	0		261	274		173	2256		264	1679	898
V/C Ratio(X)	0.87	0.00		2.36	0.52		0.84	0.94		0.90	0.56	0.56
Avail Cap(c_a), veh/h	358	0		261	274		324	2256		324	1679	898
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	59.4	0.0	0.0	59.8	55.2	0.0	62.2	37.3	0.0	58.6	24.8	24.8
Incr Delay (d2), s/veh	14.7	0.0	0.0	622.8	1.7	0.0	10.6	9.4	0.0	23.6	1.4	2.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	8.5	0.0	0.0	54.4	4.8	0.0	5.5	23.9	0.0	9.9	10.8	11.8
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	74.0	0.0	0.0	682.5	56.9	0.0	72.8	46.7	0.0	82.3	26.2	27.3
LnGrp LOS	E	A		F	E		E	D		F	C	C
Approach Vol, veh/h		214	A		757	A		2269	A		1678	
Approach Delay, s/veh		74.0			565.2			48.4			34.5	
Approach LOS		E			F			D			C	
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	25.3	66.4		23.4	18.1	73.5		25.0				
Change Period (Y+Rc), s	4.5	4.5		4.5	4.5	4.5		4.5				
Max Green Setting (Gmax), s	25.5	48.5		27.5	25.5	48.5		20.5				
Max Q Clear Time (g_c+I1), s	20.4	57.6		18.1	13.3	29.0		22.5				
Green Ext Time (p_c), s	0.4	0.0		0.8	0.3	9.1		0.0				

Intersection Summary

HCM 6th Ctrl Delay 124.3

HCM 6th LOS F

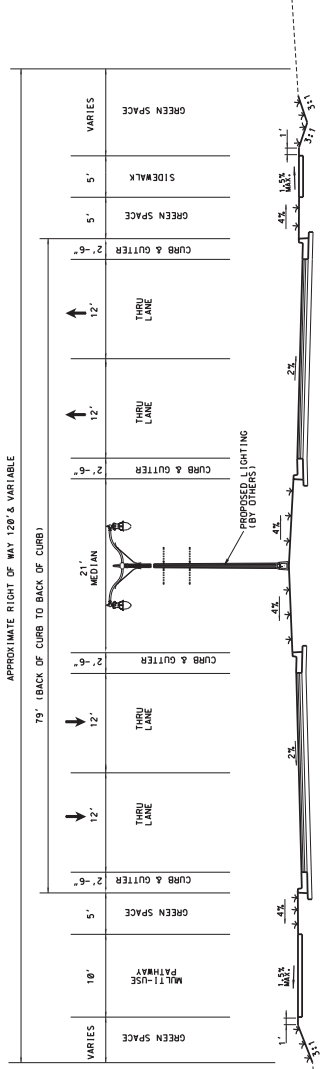
Notes

Unsignalized Delay for [NBR, EBR, WBR] is excluded from calculations of the approach delay and intersection delay.

Appendix B

Preferred Alternative C Typical Roadway and Bridge Sections

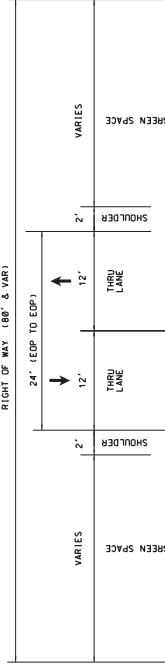
APPROXIMATE RIGHT OF WAY 120' & VARIABLE



TYPICAL SECTION

Airport Road Extension - Creosote Road/Factory Shop Blvd to New Overpass

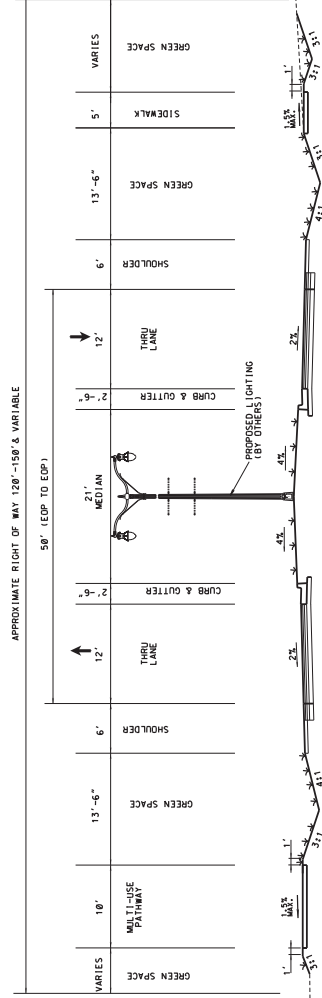
RIGHT OF WAY (80' & VAR.)



TYPICAL SECTION

OLD HWY 49
Poole Street - Old Hwy 49 to Hwy 49

APPROXIMATE RIGHT OF WAY 120' - 150' & VARIABLE



TYPICAL SECTION

Airport Road Extension - From Old Hwy 49 to Creosote Road

NOTICE TO DRAWING HOLDER
NEEL-SCHAFFER, INC. HEREBY REFERS TO AS THE ENGINEER, HAS PREPARED AND FORWARDED THIS DRAWING TO THE OWNER FOR USE OF THE PROJECT. THE ENGINEER'S RESPONSIBILITY IS LIMITED TO THE EXTENSIONS OF THIS PROJECT OR ON ANY OTHER PROJECT. ANY REUSE OF THIS DRAWING FOR ANY OTHER PROJECT WITHOUT THE WRITTEN CONSENT OF NEEL-SCHAFFER, INC. SHALL INDEMNIFY AND HOLD HARMLESS THE ENGINEER FROM ALL CLAIMS, DAMAGES, LOSSES AND EXPENSES, INCLUDING ATTORNEY'S FEES ARISING OUT OF OR RESULTING THEREFROM.

Interconnecting Gulfport
Airport Road Extension &
Interstate 10 Overpass

CITY OF GULFPORT
HARRISON COUNTY, MISSISSIPPI

REVISIONS		DRAWING INFORMATION	
NO.	DATE	BY	DESCRIPTION

N-S PROJECT NO.	15678-02
FILENAME	TYP 15678-01.DGN
SCALE	N.T.S.
SURVEYED BY	
DESIGNED BY	
DRAWN BY	
CHECKED BY	
DATE	03/2020
DATE	03/2020
DATE	
DATE	

TYPICAL SECTIONS
ALTERNATIVE C

WORKING NUMBER:
TS-03
DRAWING NUMBER:
08



Appendix B

Preferred Alternative C Miscellaneous Support Information

Table 14-2-H
GEOMETRIC DESIGN CRITERIA URBAN COLLECTORS (2-LANE/3-LANE)
(New Construction/Reconstruction)

	DESIGN ELEMENT		Manual Section	With Curb		Without Curb			
Design Controls	Design Year		14-2.01	20 Years					
	*Design Speed (1)		14-2.02	30 mph – 50 mph					
	Control of Access		11-1.05	Control by Regulation (Type 3)					
	Level of Service Threshold		14-2.01	Desirable: C Minimum: D					
Cross-Section Elements	*Travel Lane Width (2)		14-2.06	12 ft					
	Shoulder Width	*Usable (3)	14-2.06	Des: 6 ft Min: 4 ft		6 ft			
		Paved (4)		Same as Usable		See Note (4)			
	*Cross Slope	Travel Lane (5)	14-2.06	2%					
		Shoulder		Shoulder Width > 4 ft: 4% Shoulder Width ≤ 4 ft: 2%		See Note (6)			
	Auxiliary Lanes	Lane Width	14-2.07	Same as Travel Lane					
		Usable Shoulder Width		Des: 4 ft Min: 2 ft		Same as Mainline Shoulder			
	CTWLTL Width (7)		6-4.03	Desirable: 14 ft Minimum: 12 ft					
	Parking Lane Width (8)		14-2.06	Desirable: 10 ft Minimum: 8 ft					
	Sidewalk Width		14-2.06	Minimum: 5 ft					
	New and Reconstructed Bridges	*Design Loading Structural Capacity		14-2.06	HL-93				
		Minimum Width (10)			Approach Roadway Width				
	Existing Bridges to Remain in Place	*Design Loading Structural Capacity		12-3.0	See Note (11)				
		Minimum Width		14-2.06					
	Desirable Right of Way Border Width (beyond toe/top of fill/cut slope)		11-1.01 14-2.06	See Note (12)					
	Roadside Clear Zone	Guardrail		9-2.0	Usable Shoulder Width				
		Lateral Offset		14-2.06	1.5 ft (13a)		See Note (13b)		
	Slope Schedule (14)	Cut	Foreslope	14-2.08	+2%		3:1		
			Depth of Ditch		1 ft		3 ft		
			Backslope		Des: 3:1 Max: 2:1		3:1		
		Fill	Des: 3:1 Max: 2:1		4:1				
					3:1				
DESIGN SPEED				30 mph	35 mph	40 mph	45 mph	50 mph	
*Stopping Sight Distance		14-2.03	200 ft	250 ft	305 ft	360 ft	425 ft		
Intersection Sight Distance (15)		6-6.0	335 ft	390 ft	445 ft	500 ft	555 ft		
*Superelevation Rate		14-2.04	4%					6%	
*Minimum Horizontal Curve Radius	e _{max} = 4%		14-2.04	250 ft	371 ft	533 ft	711 ft	N/A	
	e _{max} = 6%			N/A					833 ft
*Maximum Grades	Level		14-2.05	9%	9%	9%	8%	7%	
	Rolling			11%	10%	10%	9%	8%	
Minimum Grades		14-2.05	See Note (16)						
Vertical Curve (K-values)	*Crest		14-2.05	19	29	44	61	84	
	Sag			37	49	64	79	96	
*Vertical Clearance (collector under)	New/Reconstructed Bridges (17)		2-8.02	Desirable: 17 ft Minimum: 16 ft					
	Existing Bridges			Desirable: 16 ft Minimum: 14.5 ft					
	Sign Truss/Ped. Bridge			19 ft					
Vertical Clearance (collector over railroad) (18)		2-8.02	25 ft						

*For application of controlling design criteria, see Section 2-9.02.

Table 14-2-I
GEOMETRIC DESIGN CRITERIA URBAN COLLECTORS (MULTILANE)
(New Construction/Reconstruction)

	DESIGN ELEMENT		Manual Section	With Curb		Without Curb			
Design Controls	Design Year		14-2.01	20 Years					
	*Design Speed (1)		14-2.02	30 mph – 50 mph					
	Control of Access		11-1.05	Control by Regulation (Type 3)					
	Level of Service Threshold		14-2.01	Desirable: C Minimum: D					
Cross-Section Elements	*Travel Lane Width (2)		14-2.06	12 ft					
	Outside Shoulder Width	*Usable (3)	14-2.06	Des: 8 ft Min: 4 ft	10 ft				
		Paved (4)		Same as Usable		8 ft			
	Median Shoulder Width	*Usable (3)	14-2.06	Des: 4 ft Min: 2 ft	8 ft				
		Paved (4)		Same as Usable		3 ft			
	*Cross Slope	Travel Lane (5)	14-2.06	2%					
		Shoulder		Shoulder Width > 4 ft: 4% Shoulder Width ≤ 4 ft: 2%	See Note (6)				
	Auxiliary Lanes	Lane Width	14-2.07	Same as Travel Lane					
		Usable Shoulder Width		Des: 4 ft Min: 2 ft	Same as Mainline Shoulder				
	CTWLT Width (7)			6-4.03	Desirable: 14 ft Minimum: 12 ft				
	Parking Lane Width (8)			14-2.06	Desirable: 12 ft Minimum: 10 ft				
	Sidewalk Width			14-2.06	Minimum: 5 ft				
	Median Width	Depressed		6-8.02	64 ft				
		Narrow/Raised		14-2.06	See Note (9)				
	New and Reconstructed Bridges	*Design Loading Structural Capacity		14-2.06	HL-93				
		Minimum Width (10)			Approach Roadway Width	Traveled Way + 10 ft (outside shoulder) + 6 ft (median shoulder)			
	Existing Bridges to Remain in Place	*Design Loading Structural Capacity		12-3.0	See Note (11)				
		Minimum Width		14-2.06					
	Desirable Right of Way Border Width (beyond toe/top of fill/cut slope)			11-1.01 14-2.06	See Note (12)				
	Roadside Clear Zone	Guardrail		9-2.0	Usable Shoulder Width				
		Lateral Offset		14-2.06	1.5 ft (13a)		See Note (13b)		
	Slope Schedule (14)	Cut	Foreslope	14-2.08	+2%		4:1		
			Depth of Ditch		1 ft		4 ft		
			Backslope		Des: 3:1 Max: 2:1		3:1		
		Fill	Height ≤ 5 ft		Des: 3:1 Max: 2:1		4:1		
			Height > 5 ft				4:1 (within clear zone) 3:1 (outside clear zone)		
Alignment Elements	DESIGN SPEED			30 mph	35 mph	40 mph	45 mph	50 mph	
	*Stopping Sight Distance		14-2.03	200 ft	250 ft	305 ft	360 ft	425 ft	
	Intersection Sight Distance		6-6.0	See Note (15)					
	*Superelevation Rate		14-2.04	4%					
	*Minimum Horizontal Curve Radius	e _{max} = 4%	14-2.04	250 ft	371 ft	533 ft	711 ft	N/A	
		e _{max} = 6%		N/A					
	*Maximum Grades	Level	14-2.05	9%	9%	9%	8%	7%	
		Rolling		11%	10%	10%	9%	8%	
	Minimum Grades		14-2.05	See Note (16)					
	Vertical Curve (K-values)	*Crest	14-2.05	19	29	44	61	84	
		Sag		37	49	64	79	96	
	*Vertical Clearance (collector under)	New/Reconstructed Bridges (17)	2-8.02	Desirable: 17 ft Minimum: 16 ft					
		Existing Bridges		Desirable: 16 ft Minimum: 14.5 ft					
		Sign Truss/Ped. Bridge		19 ft					
	Vertical Clearance (collector over railroad) (18)			2-8.02	25 ft				

*For application of controlling design criteria, see Section 2-9.02.

Footnotes for Tables 14-2-H and 14-2-I

1. Design Speed – A design speed equal to the posted speed limit may be used.
2. Travel Lane Width –
 - a. 11-foot lane widths may be used in more constrained areas and where truck and bus volumes are low. The lane widths needed for all lanes and intersection design controls should be evaluated collectively with consideration of all user modes and the adjacent land use.
 - b. The lane width should be increased by two feet for roadways that include angled on-street parking. See Section 14-2.06.06 for more information.
3. Shoulder Width –
 - a. When using new construction/reconstruction criteria on existing roadways, a minimum 2-foot shoulder width for curbed roadways may be used on the outside shoulder if right of way and/or other constraints exist. For any widths less than the desirable width, the drainage design should include consideration of the shoulder width in order to minimize ponding on the roadway.
 - b. See Section 14-2.06.01 for information on shoulder width relative to curb and gutter usage.
4. Shoulder Surface Type – Outside of the typical 2-foot paved portion, paved shoulders should not be provided except as approved in special conditions.
5. Cross Slope of Travel Lane (normal crown sections) – The typical cross slope of the traveled way in a normal crown section is 2.0%. In no case should the cross slope of an outer lane be less than that of the adjacent lane.
6. Cross Slope of Shoulder (normal crown sections) –
 - a. The cross slope of the 2-foot paved portion of the shoulder in a normal crown section should match the cross slope of the adjacent travel lane (typically 2%).
 - b. When more than the typical 2-foot paved shoulder is approved for special conditions, the cross slope of paved shoulders less than or equal to four feet should match the cross slope of the adjacent travel lane (typically 2%). The cross slope of paved shoulders greater than four feet should be 4%.
 - c. The portion of the shoulder that is not paved should have a cross slope of 4%.
 - d. In no case should the cross slope of the shoulder be less than that of the adjacent travel lane.
7. CTWLTL Width – In industrial areas with heavy truck traffic, the CTWLTL width should desirably be 16 feet. Section 6-4.03 provides more information on the CTWLTL width in areas of restricted right of way.
8. Parking Lanes – The widths shown in the tables apply only to parallel parking. Section 14-2.06.06 provides information on the design of angled parking.
9. Median Width (Raised) – The minimum raised median width on urban roadways should be 18 feet. This width should only be used where the majority of the intersections along the roadway are signalized. If many of the intersections are not signalized, then the recommended width is 22 feet, assuming no right of way restrictions. The 22-foot median width allows passenger vehicles to store within the median crossover. For medians with dual left-turn lanes, the raised median width should desirably be 36 feet, but the minimum width should be 30 feet.

10. New and Reconstructed Bridge Width –

- a. *The width shown in Table 14-2-I applies to a 1-way bridge of a divided collector. The width should be increased for auxiliary lanes or other features, such as sidewalks or bicycle lanes. For undivided roadways, the width should equal the approach roadway width.*
- b. *For bridges less than or equal to 200 feet in length, the width should be no less than the full paved width of the approach roadway when the minimum widths provided in the tables cannot be met.*

11. Existing Bridges to Remain in Place –

- a. *Design Loading Structural Capacity should equal HS-20 for bridges designed under AASHTO's Standard Specifications for Highway Bridges and HL-93 for bridges designed under AASHTO's LRFD Bridge Design Specifications.*
- b. *Undivided Roadways – The minimum existing bridge width should be the traveled way plus 2-foot shoulders on each side.*
- c. *Divided Roadways – The minimum existing bridge width should be the traveled way plus 2-foot shoulders on each side for each roadway.*
- d. *The minimum widths provided in Footnotes 11b and 11c do not include other existing features, such as auxiliary lanes, sidewalks, and bicycle lanes.*
- e. *For existing bridges that are in compliance with the applicable widths in footnotes 11b, 11c, and 11d, consideration should be given to widening the bridges to comply with the new construction width, especially in areas with high traffic volumes.*
- f. *See Section 14-2.06.05 for information on sidewalks at existing bridges.*

12. Right of Way Border Width – Right of way border widths should be determined by level of development, property values, etc.**13. Roadside Clear Zones –**

- a. With Curb – *Desirably, the clear zone for open shoulder rural sections (Section 9-2.0) should also be provided for curbed sections. The 1.5-foot lateral offset should only be used in constrained areas. The distance is measured from the face of the curb to the obstruction, regardless of shoulder width.*
- b. Without Curb – *The clear zone for open shoulder rural sections (Section 9-2.0) should be provided. Where the recommended clear zone distances cannot be met, a 12-foot lateral offset (measured from edge of traveled way) should be provided on the outside of horizontal curves, and an 8-foot lateral offset should be provided elsewhere.*

14. Slopes – If high volume change (HVC) soil is present, slope adjustments may be included as part of the earthwork recommendation. See Chapter 13, "Pavement Design", for more information on HVC soil and earthwork recommendations.**15. Intersection Sight Distance (ISD) – The values provided in Table 14-2-H assume ISD for passenger cars turning onto a level 2-lane roadway. Section 6-6.0 provides information on adjustments for grades, trucks, and multilane roadways.****16. Minimum Grades –**

- a. *On roadways with curb and gutter, the minimum longitudinal gradient should be 0.2%; however, a grade of 0.4% or greater is desirable to facilitate longitudinal drainage.*

- b. *On roadways without curb and gutter, level gradients are acceptable on pavements that are crowned adequately to drain laterally. However, a longitudinal grade of 0.4% or more is desirable, except for the Mississippi Delta or other flat areas.*
- c. *On bridges, a minimum 0.5% longitudinal grade should be provided, where feasible.*

17. Vertical Clearance (collector under) –

- a. *The vertical clearance shown in the tables should be provided over the entire collector roadway width, including shoulders.*
- b. *The desirable clearance allows for future resurfacing with additional structure depth.*
- c. *For crossing routes going under the collector roadway, the vertical clearance should be determined from the appropriate geometric design criteria table for the functional classification of the crossing route.*
- d. *Consideration should be given to raising the grade of an existing crossing route to be at or near the desirable vertical clearance if conditions exist that warrant such consideration (i.e., frequent hits by tall vehicles).*

18. Vertical Clearance (collector over railroad) – *The vertical clearance shown in the tables should typically be provided over the entire railroad right of way width.*

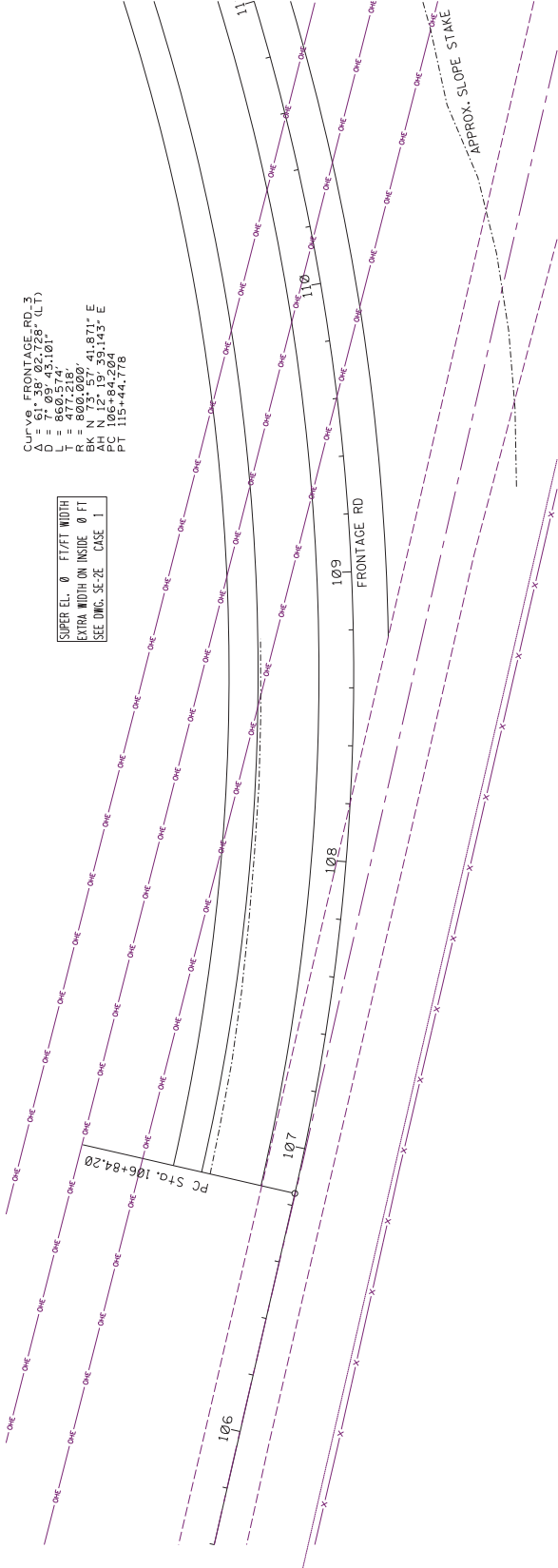
Appendix B

Preferred Alternative C Plan Profile Sheets



CURVE FRONTAGE RD. 3
Δ = 61° 38' 02.728" (LT)
L = 860.574'
R = 477.218'
BK N 0° 53' 57" 41.871" E
AH N 12° 19' 39.143" E
PC 115+44.691
PT 115+44.778

SUPER ELEV. 0' FT/FT WIDTH
EXTRA WIDTH ON INSIDE 0' FT
SEE DWG. SET-2E CASE 1



Station	106+00	107+00	108+00	109+00	110+00	111+00
30	23.04	21.89	23.00	21.79	23.04	21.69
25	23.06	21.59	23.09	21.49	23.11	21.39
20	23.14	21.29	23.10	21.19	23.05	21.09
15	22.99	20.99	22.96	20.89	22.94	20.79
10	22.88	20.69	22.49	20.59	21.80	20.50
5	20.35	20.42	20.36	20.44	20.76	20.50
0	20.37	20.50	21.67	20.59	21.97	20.69
-5	21.22	21.29	21.62	21.09	21.41	21.19

NOTICE TO DRAWING HOLDER
NEIL SCHMIDT, INC. HEREBY REQUIRES TO AS THE ENGINEER
ON THIS PROJECT ONLY. THIS DRAWING SHOULD NOT BE USED ON
ANY OTHER PROJECTS WITHOUT THE WRITTEN VERIFICATION OR ADAPTATION BY THE
ENGINEER. THE ENGINEER SHALL BE RESPONSIBLE FOR THE ACCURACY OF THE
DRAWING. THE ENGINEER SHALL INDEMNIFY AND HOLD HARMLESS THE ENGINEER FROM ALL CLAIMS,
DAMAGES, LOSSES AND EXPENSES, INCLUDING ATTORNEY'S FEES ARISING
OUT OF OR FROM THIS DRAWING.

NO. DATE BY

REVISIONS

DRAWING INFORMATION
PROJECT NO. 25106.00
FILE NAME: WFP-1.097
SCALE: 1" = 20'
SURVEYED BY:
DRAWN BY:
CHECKED BY:
DATE:

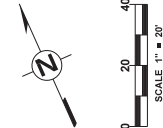
GULFPORT
BUILD GRANT ROADWAY
INTERCONNECTING GULFPORT
CITY OF GULFPORT
HARRISON COUNTY, MISSISSIPPI

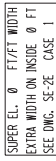
Pickering

FRONTAGE RD
STA 105+60-111+00

WORKING NUMBER:
3

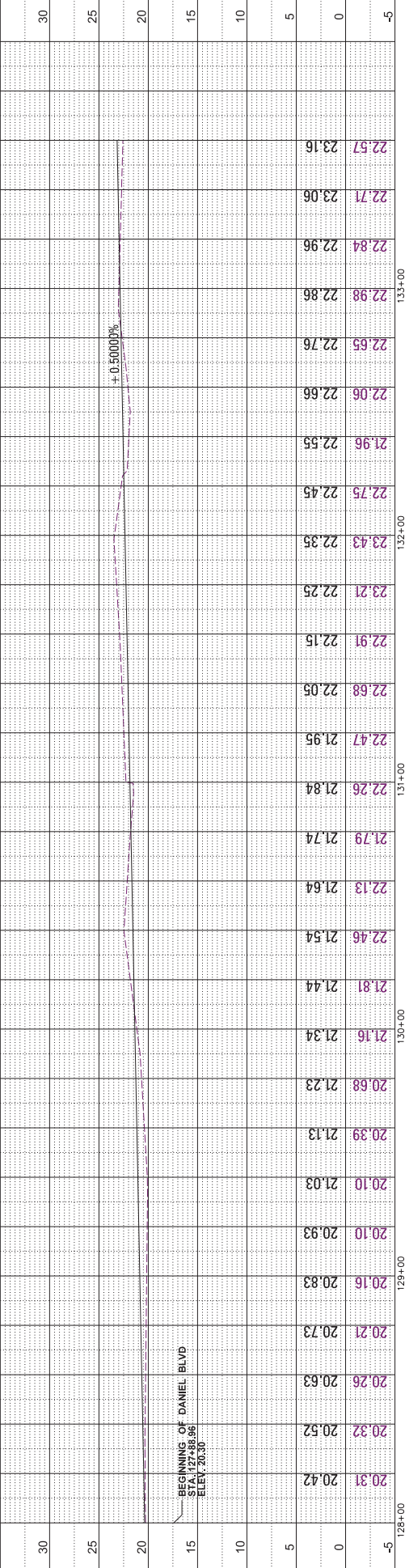
DRAWING NUMBER:
XXX OF XXX

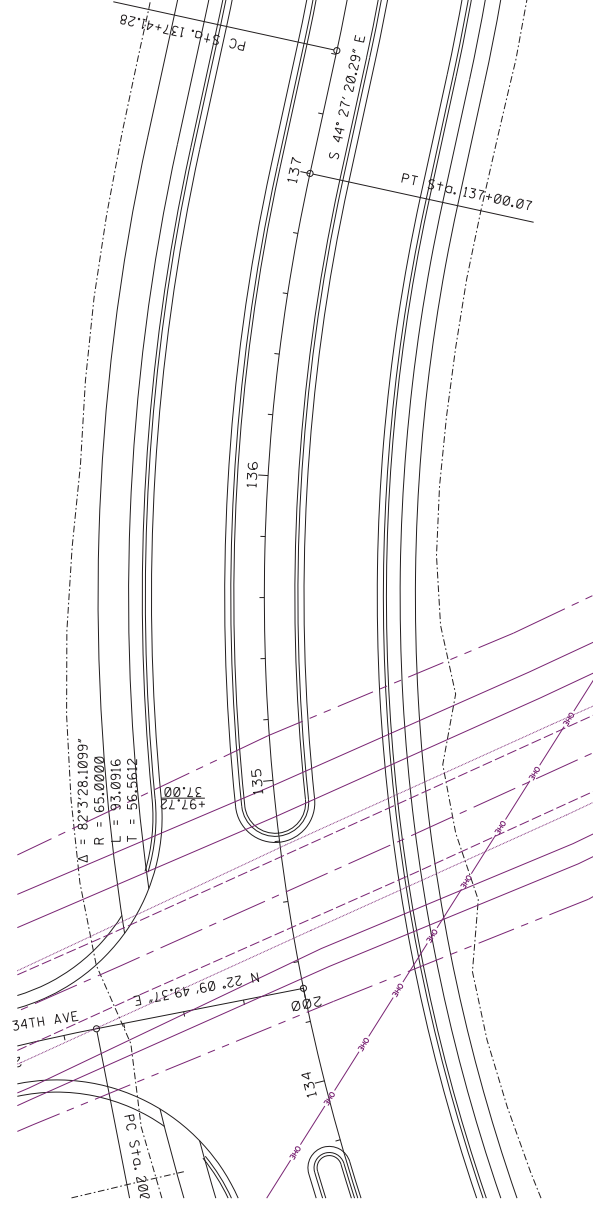
[illegible]

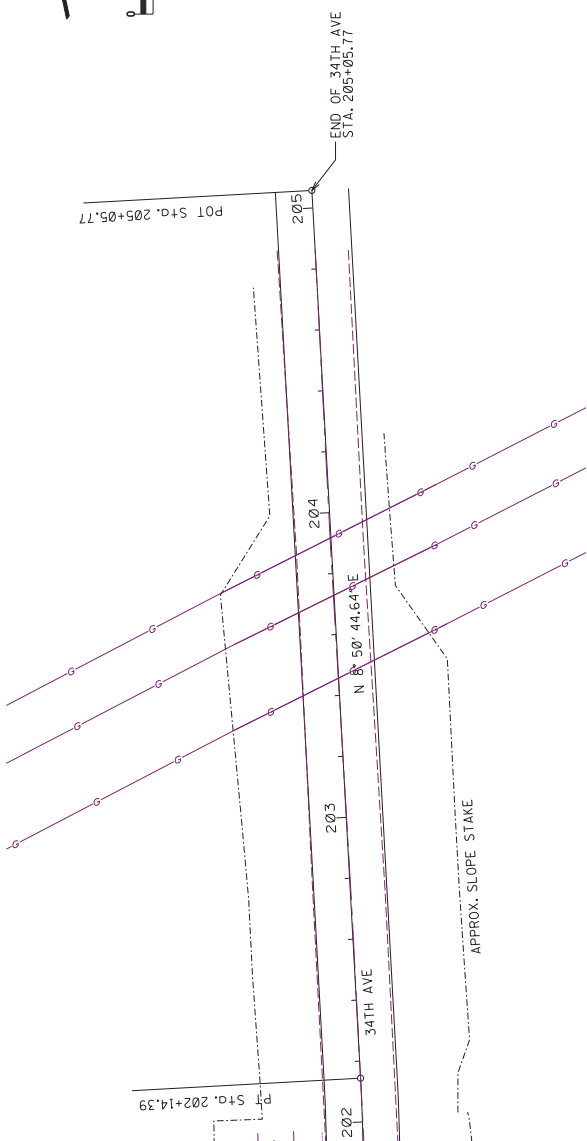
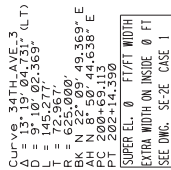


Curve FRONTAGE, RD. 6
 $\Delta = 61.40^\circ$, 56.832° (RT)
 $D = 7.09^\circ$, 43.101°
 $L = 861.250'$
 $T = 477.676'$
 $R = 800.000'$
 $BK N 12.19^\circ$, 39.143° E
 $AH N 74.00^\circ$, 35.975° E
 $PC 118+05.586$
 $PT 126+66.636$

[illegible]

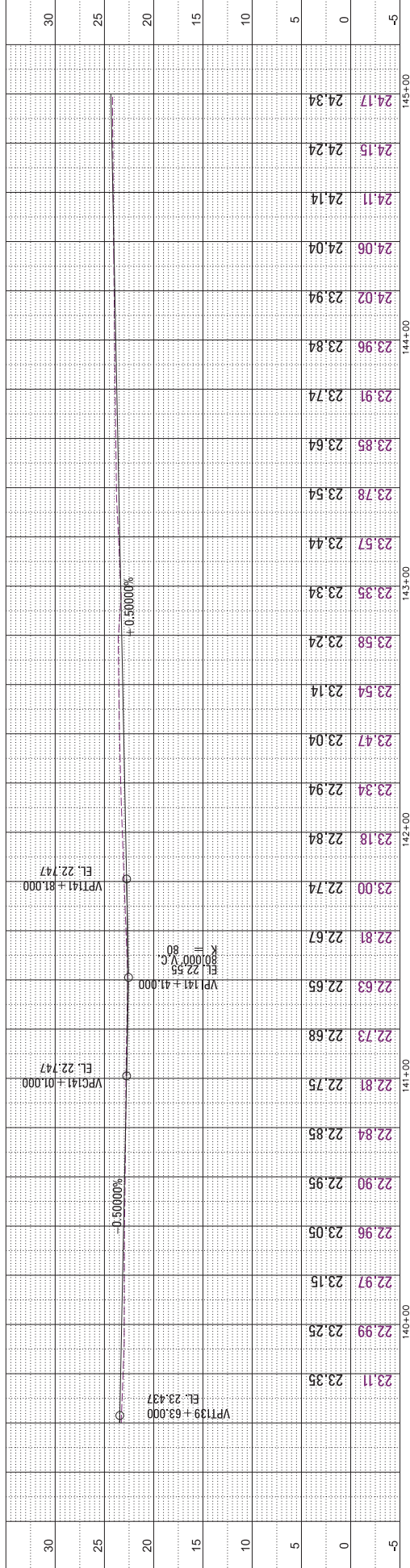
[illegible]

[illegible]

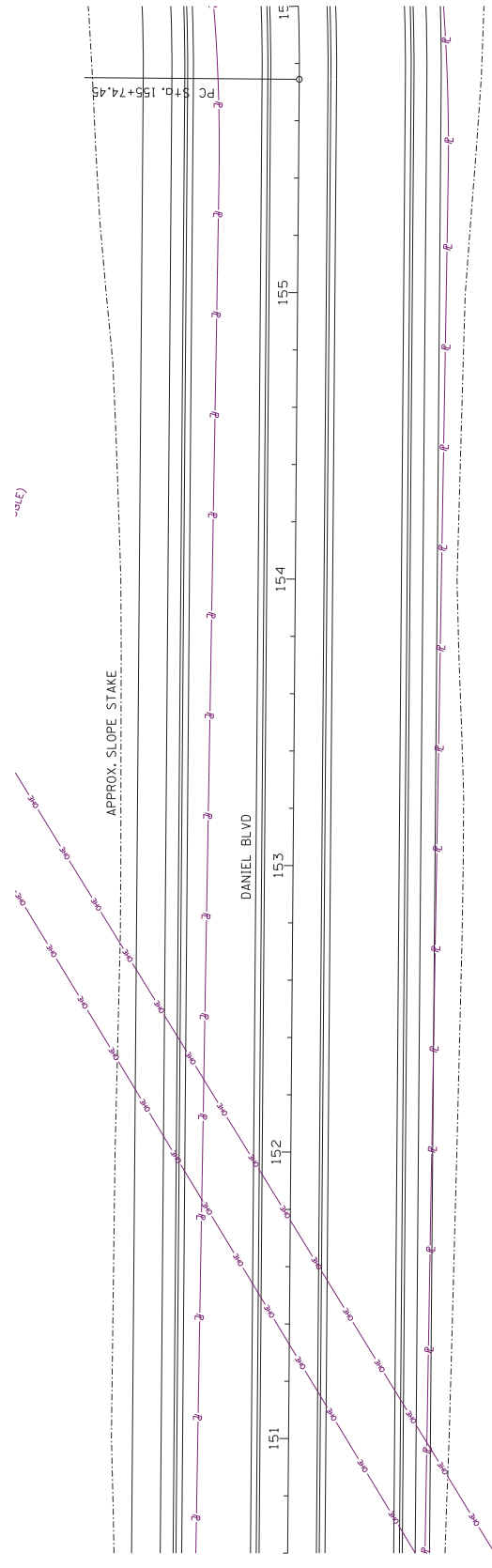


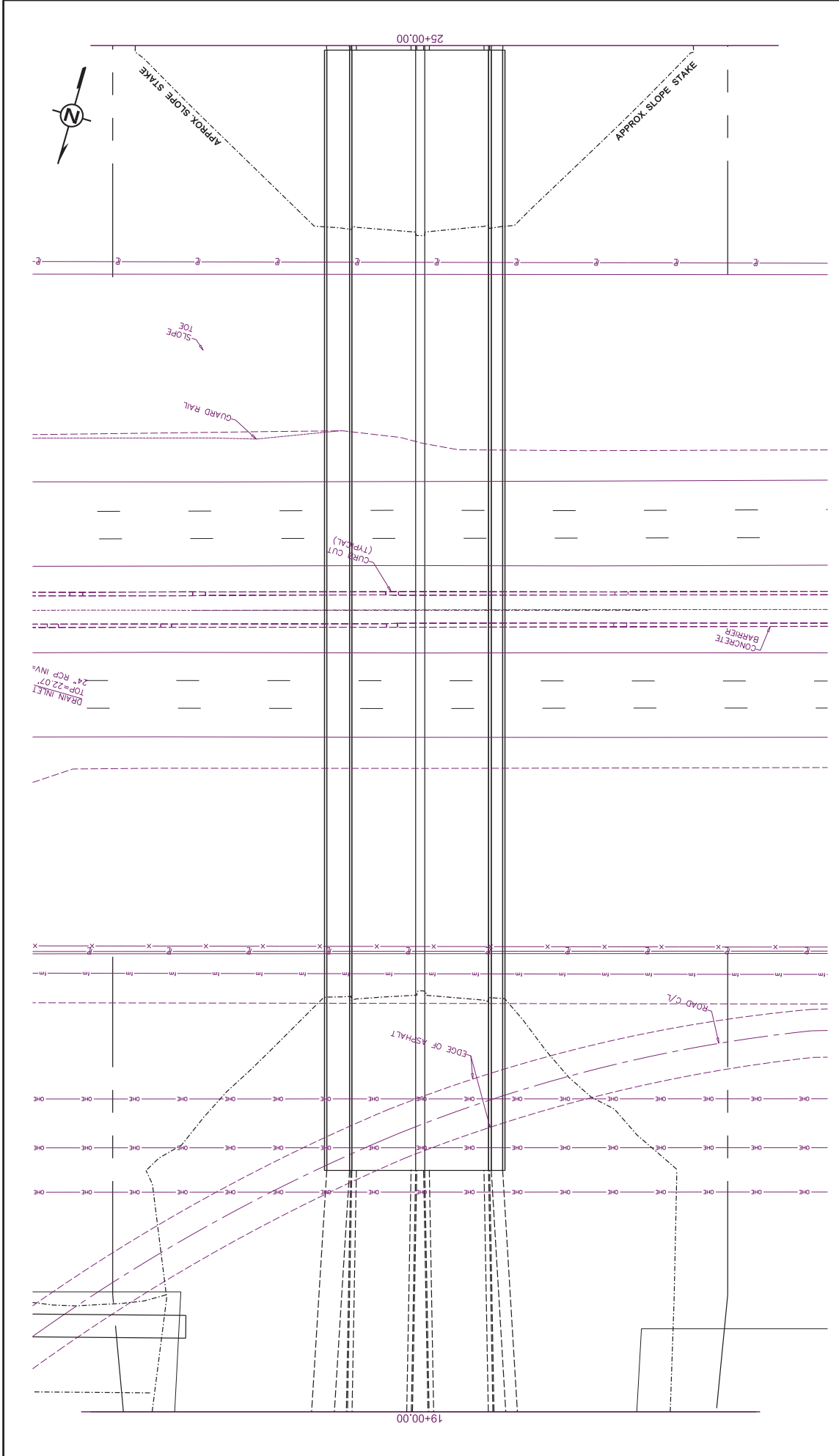
Station	Elevation	Grade (%)	Notes
200+00	23.48		
201+00	23.59		
202+00	23.70		
203+00	23.81		
204+00	23.93		
205+00	24.04		
206+00	24.15		
207+00	24.26		
208+00	24.37		
209+00	24.48		
210+00	24.60		
211+00	24.71		
212+00	24.82		
213+00	24.89		
214+00	24.91		
215+00	24.91		
216+00	24.91		
217+00	24.91		
218+00	24.91		
219+00	24.91		
220+00	24.91		
221+00	24.91		
222+00	24.91		
223+00	24.91		
224+00	24.91		
225+00	24.91		
226+00	24.91		
227+00	24.91		
228+00	24.91		
229+00	24.91		
230+00	24.91		
231+00	24.91		
232+00	24.91		
233+00	24.91		
234+00	24.91		
235+00	24.91		
236+00	24.91		
237+00	24.91		
238+00	24.91		
239+00	24.91		
240+00	24.91		
241+00	24.91		
242+00	24.91		
243+00	24.91		
244+00	24.91		
245+00	24.91		
246+00	24.91		
247+00	24.91		
248+00	24.91		
249+00	24.91		
250+00	24.91		
251+00	24.91		
252+00	24.91		
253+00	24.91		
254+00	24.91		
255+00	24.91		
256+00	24.91		
257+00	24.91		
258+00	24.91		
259+00	24.91		
260+00	24.91		
261+00	24.91		
262+00	24.91		
263+00	24.91		
264+00	24.91		
265+00	24.91		
266+00	24.91		
267+00	24.91		
268+00	24.91		
269+00	24.91		
270+00	24.91		
271+00	24.91		
272+00	24.91		
273+00	24.91		
274+00	24.91		
275+00	24.91		
276+00	24.91		
277+00	24.91		
278+00	24.91		
279+00	24.91		
280+00	24.91		
281+00	24.91		
282+00	24.91		
283+00	24.91		
284+00	24.91		
285+00	24.91		
286+00	24.91		
287+00	24.91		
288+00	24.91		
289+00	24.91		
290+00	24.91		
291+00	24.91		
292+00	24.91		
293+00	24.91		
294+00	24.91		
295+00	24.91		
296+00	24.91		
297+00	24.91		
298+00	24.91		
299+00	24.91		
300+00	24.91		

NOTICE TO DRAWING HOLDER THIS DRAWING HAS BEEN PREPARED BY THE ENGINEER FOR THE PROJECT AND THE ENGINEER HAS PREPARED AND FORWARDED THIS DRAWING TO THE OWNER FOR USE OF THE PROJECT. THIS PROJECT OR DRAWING SHOULD NOT BE USED FOR ANY OTHER PROJECT OR DRAWING WITHOUT THE WRITTEN VERIFICATION OR ADAPTATION BY THE ENGINEER. THE ENGINEER'S LIABILITY IS LIMITED TO THE PROJECT AND THE SMALL INCONVENIENCE AND HARMLESSNESS THE ENGINEER FROM ALL CLAIMS, DAMAGES, LOSSES AND EXPENSES, INCLUDING ATTORNEY'S FEES ARISING OUT OF OR RESULTING THEREFROM.		REVISIONS <table border="1"> <thead> <tr> <th>NO.</th> <th>DATE</th> <th>BY</th> <th>DESCRIPTION</th> </tr> </thead> <tbody> <tr> <td> </td> <td> </td> <td> </td> <td> </td> </tr> <tr> <td> </td> <td> </td> <td> </td> <td> </td> </tr> <tr> <td> </td> <td> </td> <td> </td> <td> </td> </tr> </tbody> </table>		NO.	DATE	BY	DESCRIPTION													DRAWING INFORMATION <table border="1"> <tr> <td>PAT PROJECT NO.</td> <td>25106.00</td> </tr> <tr> <td>PROJECT NAME</td> <td>Interconnecting Gulport</td> </tr> <tr> <td>SCALE</td> <td>1" = 20'</td> </tr> <tr> <td>SUBJECT BY</td> <td> </td> </tr> <tr> <td>ISSUED ON</td> <td> </td> </tr> <tr> <td>DRAWN BY</td> <td> </td> </tr> <tr> <td>CHECKED BY</td> <td> </td> </tr> <tr> <td>DATE</td> <td> </td> </tr> <tr> <td>DATE</td> <td> </td> </tr> <tr> <td>DATE</td> <td> </td> </tr> <tr> <td>DATE</td> <td> </td> </tr> </table>		PAT PROJECT NO.	25106.00	PROJECT NAME	Interconnecting Gulport	SCALE	1" = 20'	SUBJECT BY		ISSUED ON		DRAWN BY		CHECKED BY		DATE		DATE		DATE		DATE	
NO.	DATE	BY	DESCRIPTION																																								
PAT PROJECT NO.	25106.00																																										
PROJECT NAME	Interconnecting Gulport																																										
SCALE	1" = 20'																																										
SUBJECT BY																																											
ISSUED ON																																											
DRAWN BY																																											
CHECKED BY																																											
DATE																																											
DATE																																											
DATE																																											
DATE																																											
NOTICE TO ENGINEER THIS DRAWING HAS BEEN PREPARED BY THE ENGINEER FOR THE PROJECT AND THE ENGINEER HAS PREPARED AND FORWARDED THIS DRAWING TO THE OWNER FOR USE OF THE PROJECT. THIS PROJECT OR DRAWING SHOULD NOT BE USED FOR ANY OTHER PROJECT OR DRAWING WITHOUT THE WRITTEN VERIFICATION OR ADAPTATION BY THE ENGINEER. THE ENGINEER'S LIABILITY IS LIMITED TO THE PROJECT AND THE SMALL INCONVENIENCE AND HARMLESSNESS THE ENGINEER FROM ALL CLAIMS, DAMAGES, LOSSES AND EXPENSES, INCLUDING ATTORNEY'S FEES ARISING OUT OF OR RESULTING THEREFROM.				DRAWING INFORMATION <table border="1"> <tr> <td>PAT PROJECT NO.</td> <td>25106.00</td> </tr> <tr> <td>PROJECT NAME</td> <td>Interconnecting Gulport</td> </tr> <tr> <td>SCALE</td> <td>1" = 20'</td> </tr> <tr> <td>SUBJECT BY</td> <td> </td> </tr> <tr> <td>ISSUED ON</td> <td> </td> </tr> <tr> <td>DRAWN BY</td> <td> </td> </tr> <tr> <td>CHECKED BY</td> <td> </td> </tr> <tr> <td>DATE</td> <td> </td> </tr> <tr> <td>DATE</td> <td> </td> </tr> <tr> <td>DATE</td> <td> </td> </tr> <tr> <td>DATE</td> <td> </td> </tr> </table>		PAT PROJECT NO.	25106.00	PROJECT NAME	Interconnecting Gulport	SCALE	1" = 20'	SUBJECT BY		ISSUED ON		DRAWN BY		CHECKED BY		DATE		DATE		DATE		DATE																	
PAT PROJECT NO.	25106.00																																										
PROJECT NAME	Interconnecting Gulport																																										
SCALE	1" = 20'																																										
SUBJECT BY																																											
ISSUED ON																																											
DRAWN BY																																											
CHECKED BY																																											
DATE																																											
DATE																																											
DATE																																											
DATE																																											



NOTICE TO DRAWING HOLDER			REVISIONS		DRAWING INFORMATION	
NO.	DATE	BY	DESCRIPTION			
NEEL-SCHAFER, INC. - HEREINAFTER REFERRED TO AS THE ENGINEER, HAS PREPARED THIS DRAWING FOR THE PROJECT DESCRIBED HEREON. ON THIS PROJECT ONLY, THIS DRAWING SHOULD NOT BE USED ON ANY OTHER PROJECT. ANY REUSE OF THIS DRAWING FOR ANY OTHER PROJECT WITHOUT WRITTEN VERIFICATION OR ADAPTATION BY THE ENGINEER SHALL BE AT THE USER'S SOLE RISK. THE ENGINEER'S LIABILITY IS LIMITED TO THE SMALL INCURRY AND HOLD HARMLESS THE ENGINEER FROM ALL CLAIMS, DAMAGES, LOSSES AND EXPENSES, INCLUDING ATTORNEY'S FEES ARISING OUT OF OR IN CONNECTION THEREWITH.						
GULFPORT BUILD GRANT ROADWAY INTERCONNECTING GULFPORT						
CITY OF GULFPORT HARRISON COUNTY, MISSISSIPPI						
					DANIEL BLVD STA 139+60-145+00	
WORKING NUMBER: 9					DRAWING NUMBER: XXX of XXX	

[illegible]



PLAN & PROFILE
AIRPORT ROAD EXT.
STA 19+00 TO 25+00

WORKING NUMBER:
PP-01-PLN

DRAWING NUMBER:
1 OF 21

NEEL-SCHAFER
Solutions you can build upon

Interconnecting Gulfport
Airport Road Extension &
Interstate 10 Overpass

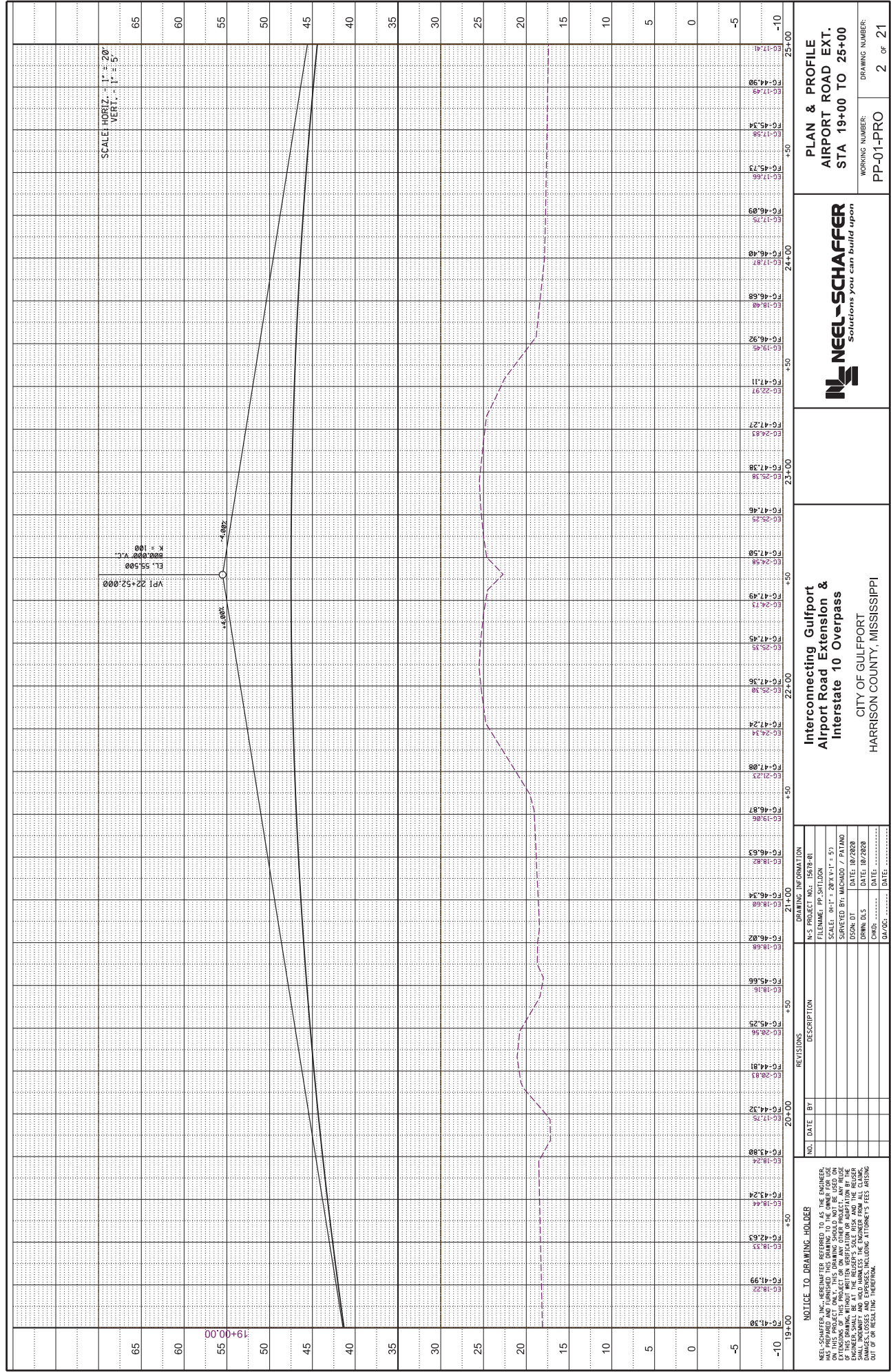
CITY OF GULFPORT
HARRISON COUNTY, MISSISSIPPI

DRAWING INFORMATION	
N-S PROJECT NO.	15678-R
FILENAME	PP-SHILTON
SCALE	0"=1' = 20'X 1" = 5'
SURVEYED BY	MACHADO / PATANO
DESIGN BY	DATE: 10/2020
DESIGN DATE	DATE: 10/2020
DATE	DATE: 10/2020
DATE	DATE: 10/2020
DATE	DATE: 10/2020
DATE	DATE: 10/2020

REVISIONS	
NO.	DATE

NOTICE TO DRAWING HOLDER

NEEL-SCHAFER, INC. HEREBY REFERS TO AS THE ENGINEER, HAS PREPARED AND FURNISHED THIS DRAWING TO THE OWNER FOR USE IN THE PROJECT DESCRIBED HEREON. THE ENGINEER'S LIABILITY IS LIMITED TO THE DESIGN AND CONSTRUCTION OF THE PROJECT DESCRIBED HEREON. THE ENGINEER SHALL NOT BE RESPONSIBLE FOR ANY OTHER PROJECTS, ANY REUSE OF THIS DRAWING FOR ANY OTHER PROJECT, OR ANY OTHER EXTENSIONS OF THIS PROJECT OR ANY OTHER PROJECT. THE ENGINEER SHALL BE AT THE REQUESTER'S RISK AND THE REQUESTER SHALL INDEMNIFY AND HOLD HARMLESS THE ENGINEER FROM ALL CLAIMS, DAMAGES, LOSSES AND EXPENSES, INCLUDING ATTORNEY'S FEES ARISING OUT OF OR RESULTING THEREFROM.





NOTICE TO DRAWING HOLDER

[illegible]

DRAWING INFORMATION
N-S PROJECT NO.: 15678-01
FILENAME: PP.SHT1.DGN
SCALE: 04'-1" = 20' X 1" = 5'
SURVEYED BY: MACHADO / PATANO
DSGN: DT
DATE: 10/2020
DRWN: DLS
DATE: 10/2020
CHKD:
DATE:

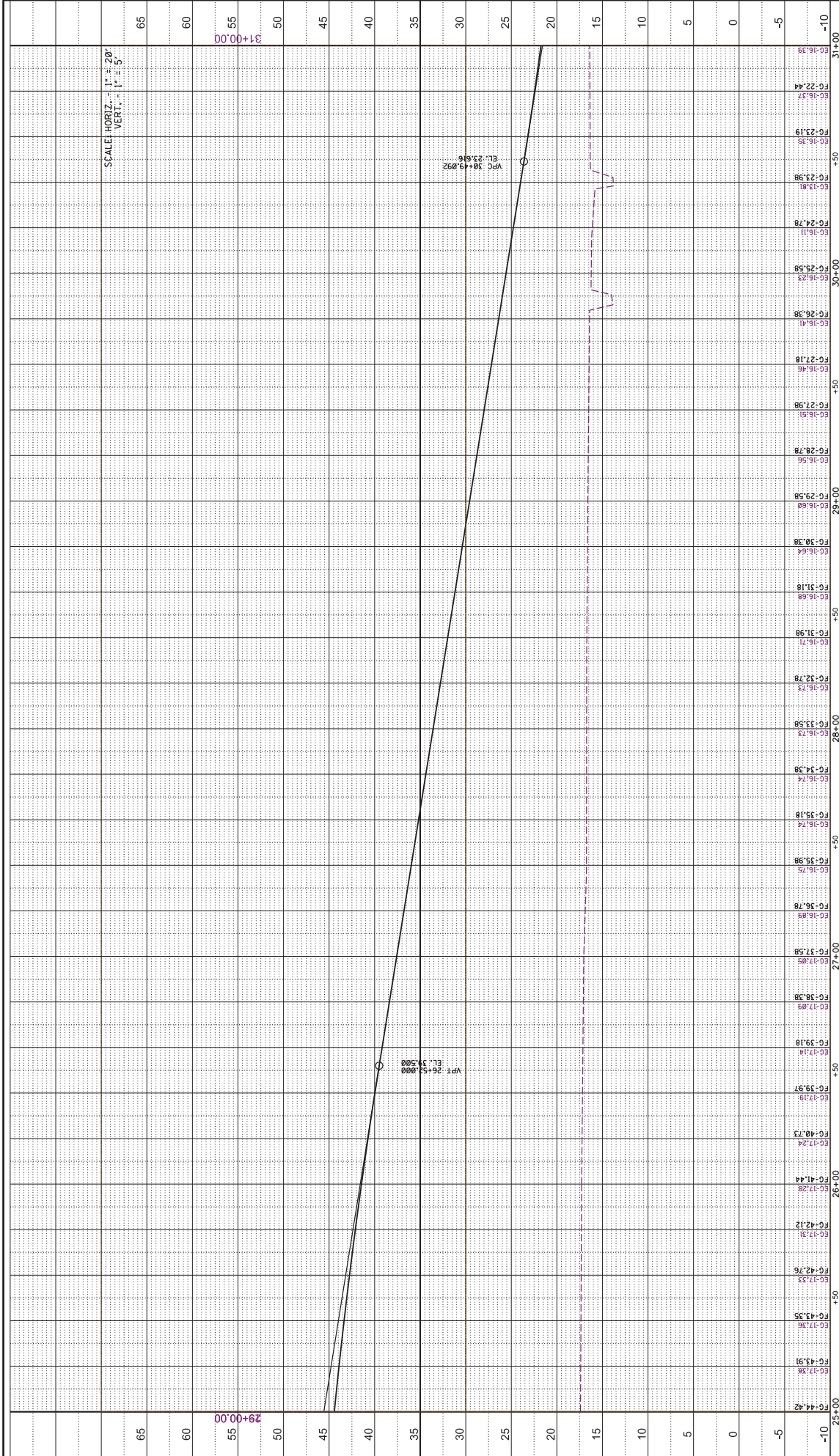
**Interconnecting Gulfport
Airport Road Extension &
Interstate 10 Overpass**



NEEL-SCHAFFER
Solutions you can build upon

PLAN & PROFILE
AIRPORT ROAD EXT.
STA 25+00 TO 31+00

WORKING NUMBER: PP-02-PLN	DRAWING NUMBER: 3 of 21
------------------------------	----------------------------



PLAN & PROFILE
AIRPORT ROAD EXT.
STA 25+00 TO 31+00

WORKING NUMBER:
PP-02-PRO

DRAWING NUMBER:
4 OF 21

NEEL-SCHAFFER
Solutions you can build upon

Interconnecting Gulfport
Airport Road Extension &
Interstate 10 Overpass

CITY OF GULFPORT
HARRISON COUNTY, MISSISSIPPI

NOTICE TO DRAWING HOLDER
NEEL-SCHAFFER, INC. HEREBY WARRANTS THAT THIS DRAWING WAS PREPARED AND FORWARDED TO THE OWNER FOR USE
EXTENSIONS OF THIS PROJECT OR ANY OTHER PROJECT, ANY REUSE
ENGINEER SHALL BE AT THE REQUESTER'S RISK AND THE REQUESTER
SHALL INDEMNIFY AND HOLD HARMLESS THE ENGINEER FROM ALL CLAIMS,
DAMAGES AND LOSSES, INCLUDING ATTORNEY'S FEES ARISING
OUT OF OR RESULTING THEREFROM.

REVISIONS

DRAWING INFORMATION

NO. DATE BY

DESCRIPTION

N-S PROJECT NO.: 15618-R

FILENAME: PP-02-PRO

SCALE: 0" = 1" = 20' X 1" = 5'

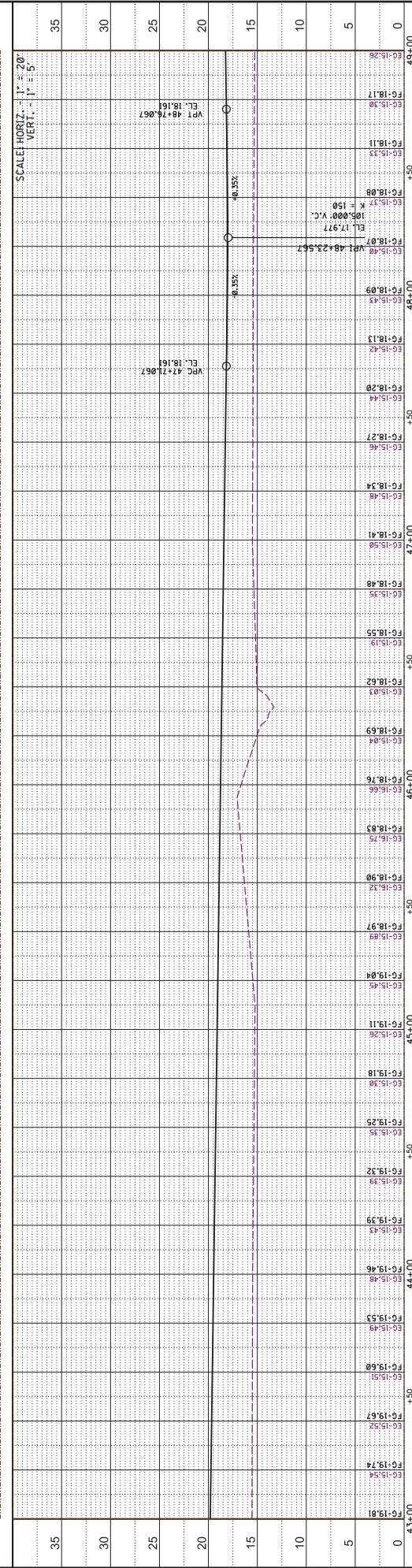
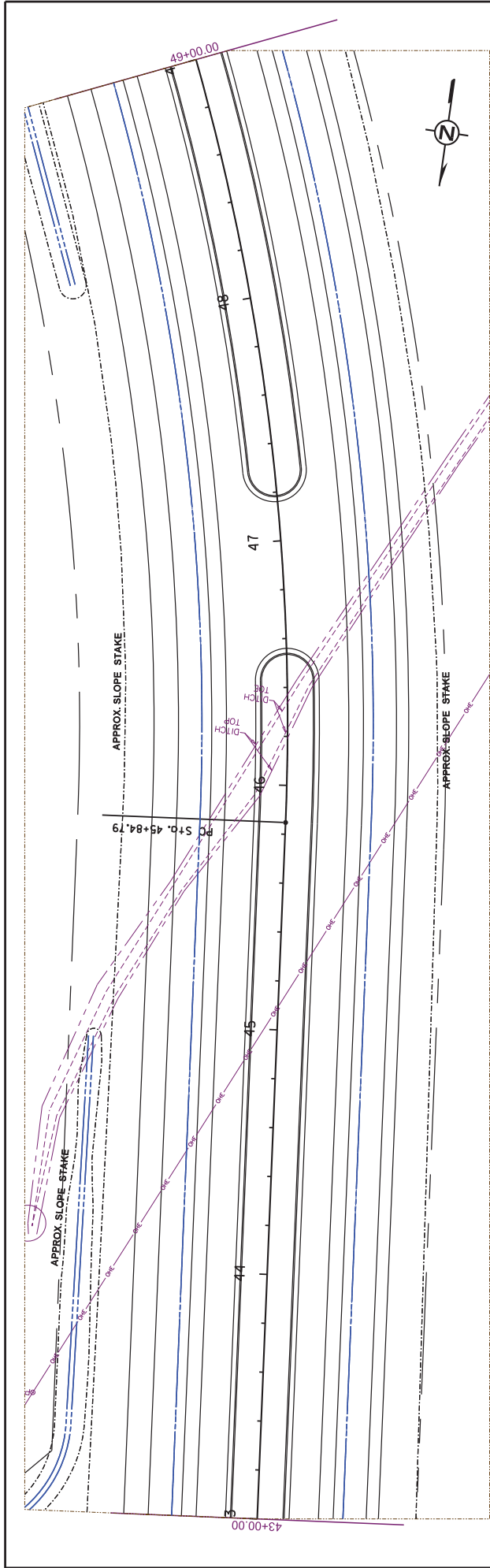
SURVEYED BY: MICHAEL J. PATANO

DESIGN BY: DATE: 10/20/2020

DRAWN BY: DATE: 10/20/2020

CHECKED: DATE: 10/20/2020

DATE: 10/20/2020



NEEL-SCHAFER
Solutions you can build upon

Interconnecting Gulfport
Airport Road Extension &
Interstate 10 Overpass

CITY OF GULFPORT
HARRISON COUNTY, MISSISSIPPI

PLAN & PROFILE
AIRPORT ROAD EXT.
STA 43+00 TO 49+00

WORKING NUMBER:
PP-05

DRAWING NUMBER:
7 OF 21

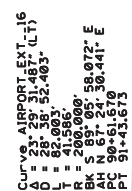
NOTICE TO DRAWING HOLDER
NEEL-SCHAFER, INC. HEREBY REFERS TO AS THE ENGINEER,
HAS PREPARED AND FORWARDED THIS DRAWING TO THE OWNER FOR USE
EXTENSIONS OF THIS PROJECT OR ON ANY OTHER PROJECT. ANY REUSE
OF THIS DRAWING WITHOUT THE WRITTEN CONSENT OF NEEL-SCHAFER,
ENGINEER SHALL BE AT THE USER'S SOLE RISK AND THE USER
SHALL INDEMNIFY AND HOLD HARMLESS THE ENGINEER FROM ALL CLAIMS,
DAMAGES, LOSSES AND EXPENSES, INCLUDING ATTORNEY'S FEES ARISING
OUT OF OR RESULTING THEREFROM.

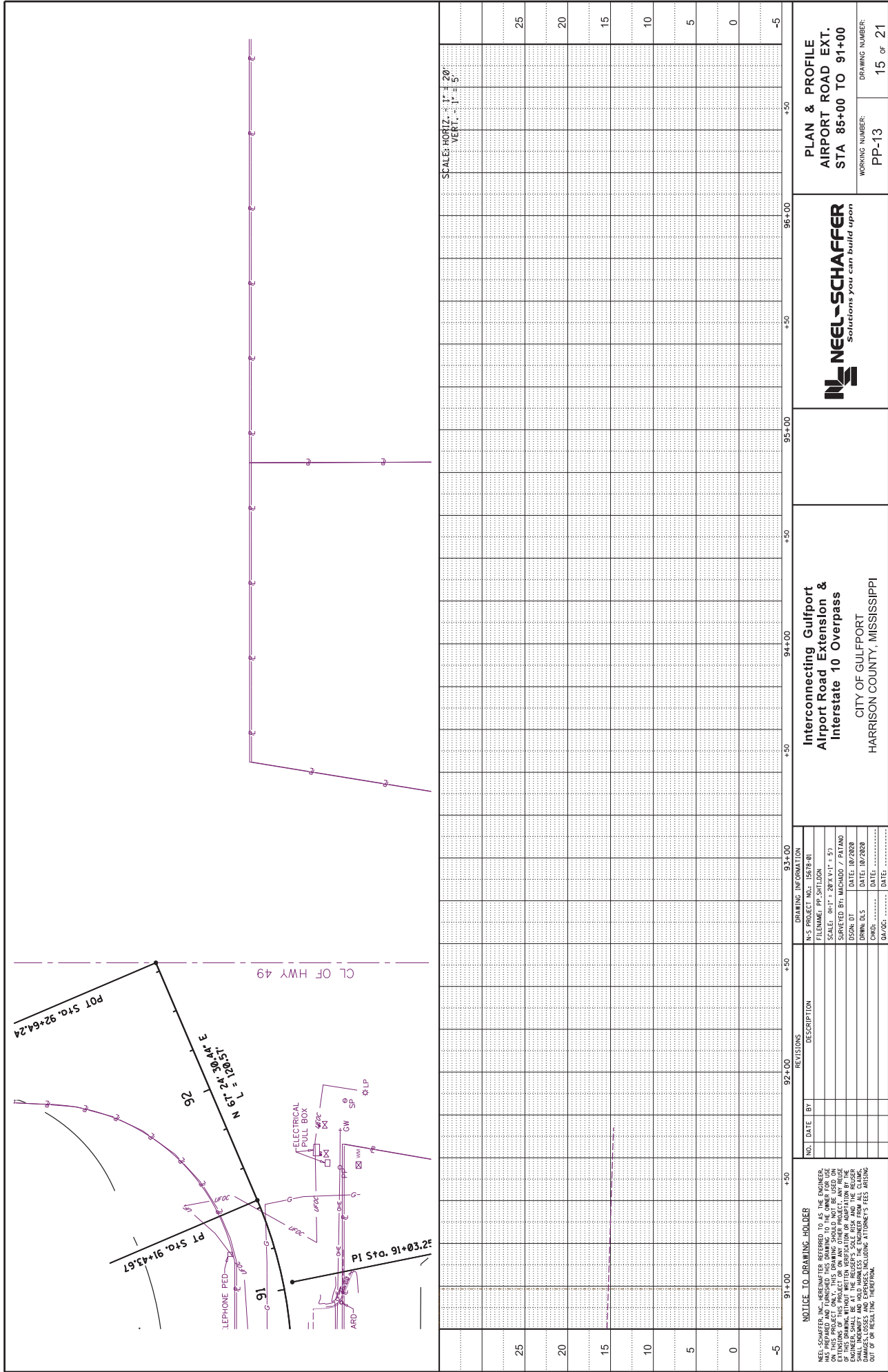
NO. DATE BY

REVISIONS DESCRIPTION

DRAWING INFORMATION

N-S PROJECT NO. 15618-R1
FILENAME: PP-SHILTON
SCALE: 0"=1' & 20'X1"=1' & 5"
SURVEYED BY: MACHADO / PATANO
DESIGN BY: DATE: 10/2020
DRAWN BY: DATE: 10/2020
CHECKED: DATE:
DATE:

SCALE: HORIZ. 1" = 20'[illegible]



NOTICE TO DRAWING HOLDER
NEEL-SCHAFER, INC. HEREBY REFERS TO AS THE ENGINEER, HAS PREPARED AND FURNISHED THIS DRAWING TO THE OWNER FOR USE IN CONNECTION WITH THE PROJECT DESCRIBED HEREIN. ANY REUSE OR EXTENSION OF THIS PROJECT OR ON ANY OTHER PROJECT, ANY REUSE OF THIS DRAWING WITHOUT THE WRITTEN CONSENT OF NEEL-SCHAFER, INC. SHALL BE AT THE USER'S SOLE RISK AND THE USER SHALL INDEMNIFY AND HOLD HARMLESS THE ENGINEER FROM ALL CLAIMS, DAMAGES, LOSSES AND EXPENSES, INCLUDING ATTORNEY'S FEES ARISING OUT OF OR RESULTING THEREFROM.

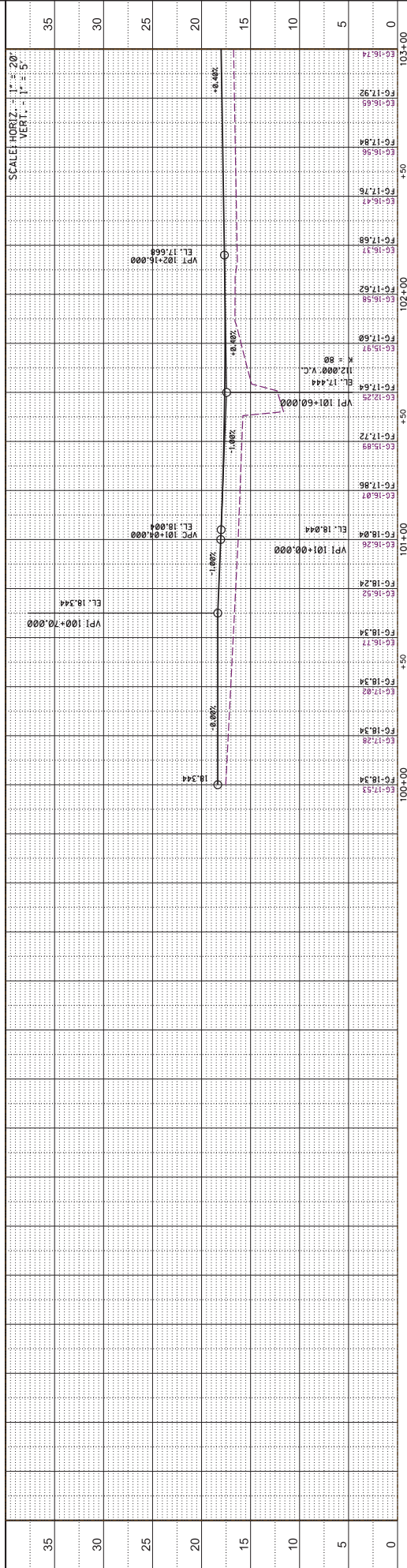
REVISIONS		DRAWING INFORMATION	
NO.	DATE	BY	DESCRIPTION

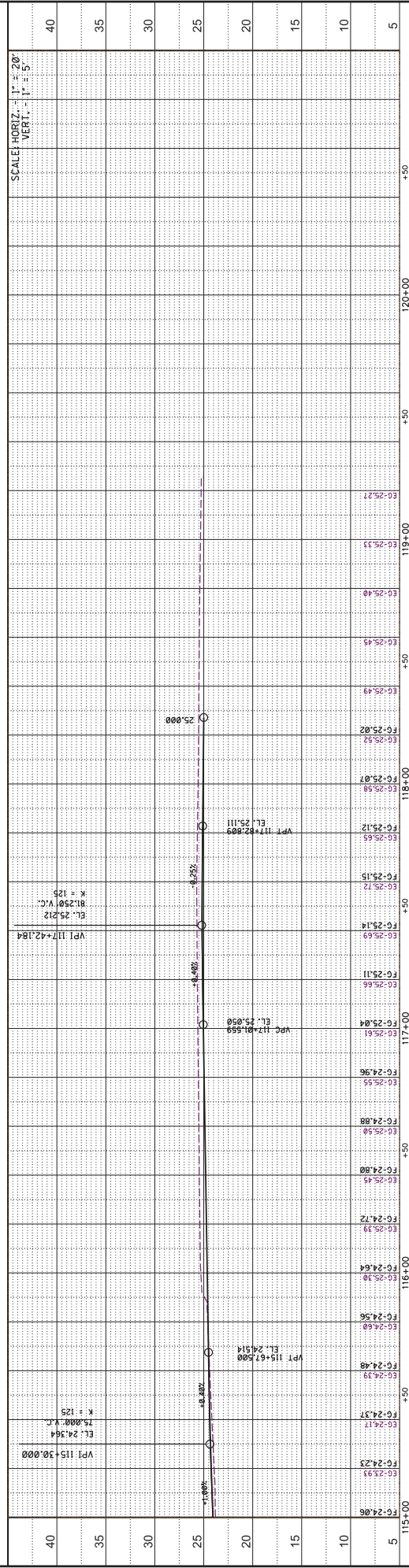
N-S PROJECT NO.: 15618-R
FILENAME: PP-SHILTON
SCALE: 0"=1' = 20'X 1"= 5'
SURVEYED BY: MACHADO / PATANO
DESIGN BY: MACHADO / PATANO
DESIGN DATE: 10/2020
DRAWN BY: MACHADO / PATANO
CHECKED BY: MACHADO / PATANO
DATE: 10/2020

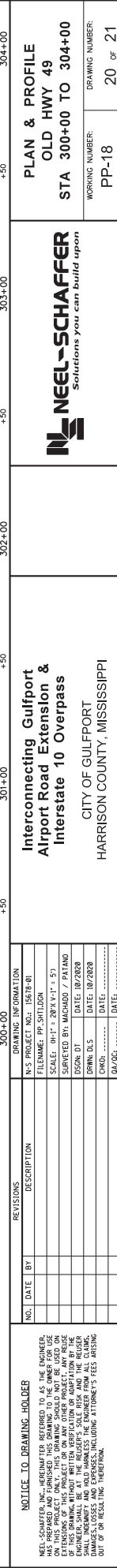
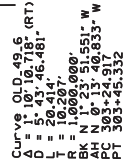
Interconnecting Gulfport
Airport Road Extension &
Interstate 10 Overpass
CITY OF GULFPORT
HARRISON COUNTY, MISSISSIPPI

NEEL-SCHAFER
Solutions you can build upon

PLAN & PROFILE
AIRPORT ROAD EXT.
STA 85+00 TO 91+00
WORKING NUMBER: PP-13
DRAWING NUMBER: 15 OF 21

[illegible]

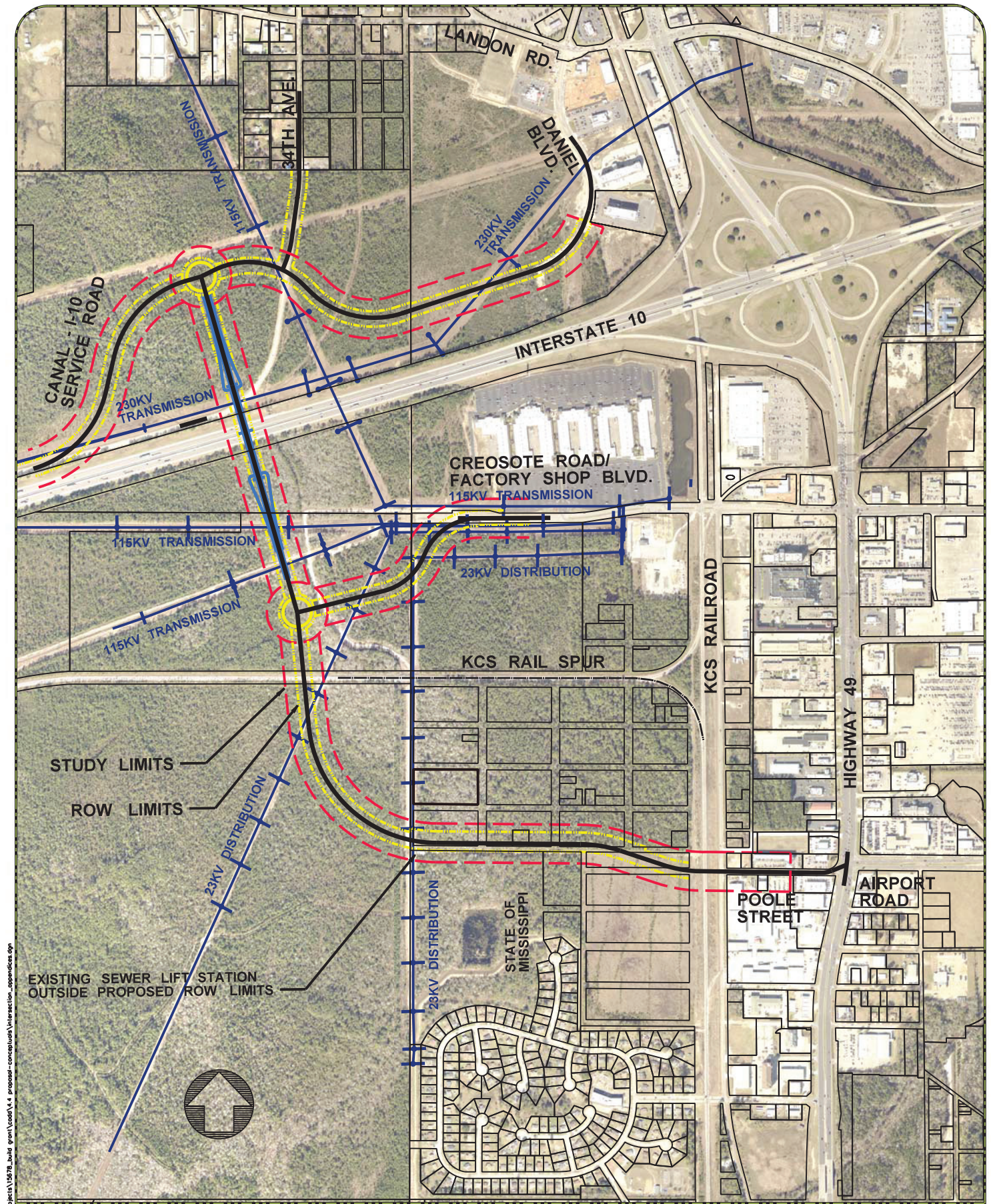
[illegible]

[illegible]



Appendix B

Preferred Alternative C Figure



k:\projects\15078_build_gm\15078\4.4_proposal-conceptual\interaction_appendix.dgn

Appendix B

Preferred Alternative C Project Cost Estimate

Estimated 2021 Costs and Credits for Preferred Alternative C

Preliminary Engineering, Railroad Crossings, Utility Relocation, and Right-of-Way Costs	Wetland Mitigation and Stormwater Retention Costs	Construction Costs	Right of Way Donation Credits	TOTAL COST (\$)
\$11,060,000	\$5,640,000	\$28,300,000	\$5,000,000	\$40,000,000

Source: Mississippi Power, KCS Railroad, City of Gulfport, & Harrison County Real Estate Records

Interconnecting Gulfport BUILD Grant Roadway

Opinion of Probable Project Cost

3/15/2021

Item	Current Estimate
Engineering	\$ 2,180,000.00
ROW Acquisition	\$ 5,800,000.00
Environmental	\$ 510,000.00
MPC Power Line Relocation	\$ 1,400,000.00
Railroad Crossings	\$ 1,170,000.00
Subtotal Engineering, Railroad Crossings, Utility Relocation, and ROW	\$ 11,060,000.00
Wetland, Stream & Stormwater Mitigation	\$ 5,640,000.00
Construction	\$ 28,300,000.00
Total Cost	\$ 45,000,000.00
Donated ROW	\$ (5,000,000.00)
Total Credits	\$ (5,000,000.00)
Total Cost Less Credits	\$ 40,000,000.00

Right of Way

Begin Station	End Station	Tax Parcel Number	Owner(s)	Land Area Needed (Acres)	Land Area Cost Factor \$/acre	Land Area Estimated Cost (\$)
0+00	21+02.24	0709H-01-004.000	Greater Gulfport Properties, LLC	6.30	100,000	630,000
106+84.2	126+02.19	0709H-01-004.000	Greater Gulfport Properties, LLC	5.19	100,000	519,000
129+77.15	145+46.45	0709H-01-004.000	Greater Gulfport Properties, LLC	4.32	100,000	432,000
200+60.00	205+05.77	0709H-01-004.000	Greater Gulfport Properties, LLC	1.23	100,000	123,000
145+46.46	159+89.38	0809D-02-002.000	Anchor Development, LLC (lessee)	3.97	120,000	477,000
24+04.81	29+06.15	0709H-02-001.000	Turkey Creek Limited Partnership	2.81	70,000	197,000
29+06.15	41+62.22	0709I-01-001.000	Turkey Creek Limited Partnership	5.35	70,000	375,000
102+38.12	109+36.48	0709I-01-001.000	Turkey Creek Limited Partnership	1.93	70,000	135,000
109+36.48	114+72.33	0809L-03-004.000	Prime Asset, LLC	1.57	80,000	126,000
116+23.54	118+81.04	0809E-02-004.000	Gulfport Factory Shops, LTD (lessee)	0.10	400,000	38,000
42+60.93	58+43.58	0709O-01-001.000	T Jerard Gulfport, LLC	5.87	20,000	117,000
43+80.43	48+24.49	0809L-02-024.000	Land Trust for Miss Coastal Plain	3.10	100,000	310,000
50+43.92	56+11.58	0809L-02-023.000	Land Trust for Miss Coastal Plain	2.96	100,000	296,000
62+39.29	63+64.67	0809L-02-023.001	Land Trust for Miss Coastal Plain	0.14	100,000	14,000
56+56.11	63+69.46	0809L-02-022.000	Land Trust for Miss Coastal Plain	3.10	100,000	310,000
58+15.74	63+69.46	0809L-02-021.000	Land Trust for Miss Coastal Plain	3.10	100,000	310,000
64+35.00	69+36.06	0809L-02-020.000	Land Trust for Miss Coastal Plain	1.21	100,000	121,000
66+35.00	67+60	0809L-02-020.001	Land Trust for Miss Coastal Plain	0.36	100,000	36,000
70+01.05	74+99.56	0809L-02-011.000	Land Trust for Miss Coastal Plain	1.34	100,000	134,000
75+61.26	79+58.24	0809L-02-009.000	Land Trust for Miss Coastal Plain	0.10	100,000	10,000
72+13.09	80+32.27	0809M-01-001.000	Summit Development Corp	1.32	100,000	132,000
83+23.68	84+36.67	0809M-03-010.000	D N D Towing Storage, Inc	0.06	120,000	7,000
84+36.67	85+18.67	0809M-03-011.000	D N D Towing Storage, Inc	0.03	120,000	4,000
85+18.67	89+11.32	0809N-02-001.001	S J M Investments, LLC	0.05	120,000	6,000
83+23.68	88+14.48	0809N-02-005.000	Phillips Building Supply of GPT, Inc	0.06	120,000	8,000
79+00	80+32.27	0809M-01-002.000	Summit Development Corp	0.06	100,000	6,000
Right or Way Total				55.64		\$ 4,873,000.00

Construction and Maintenance Easements

Begin Station	End Station	Parcel Number	Owner(s)	Land Area Needed (Acres)	Land Area Cost Factor \$/acre	Land Area Estimated Cost (\$)
35+90.71	36+16.01	0709I-01-001.000	Turkey Creek Limited Partnership	0.02	20,000	-
101+51.05	102+10.63	0709I-01-001.000	Turkey Creek Limited Partnership	0.03	20,000	1,000
37+60.19	42+09.43	0709I-01-001.000	Turkey Creek Limited Partnership	0.79	20,000	16,000
42+60.93	43+24.51	0709O-01-001.000	T Jerard Gulfport, LLC	0.51	20,000	10,000
43+60.35	48+24.49	0809L-02-024.000	Land Trust for Miss Coastal Plain	3.10	20,000	62,000
43+60.35	48+24.49	0809L-02-017.000	Land Trust for Miss Coastal Plain	3.10	20,000	62,000
43+60.35	48+24.49	0809L-02-016.000	Land Trust for Miss Coastal Plain	3.10	20,000	62,000
43+60.35	48+24.49	0809L-02-006.000	Land Trust for Miss Coastal Plain	1.01	20,000	20,000
43+60.35	48+24.49	0809L-02-001.000	Land Trust for Miss Coastal Plain	0.36	20,000	7,000
43+60.35	48+24.49	0809L-02-002.000	Land Trust for Miss Coastal Plain	0.25	20,000	5,000
43+60.35	48+24.49	0809L-02-005.000	Land Trust for Miss Coastal Plain	0.22	20,000	4,000
43+60.35	48+24.49	0809L-02-004.000	Land Trust for Miss Coastal Plain	0.29	20,000	6,000
43+60.35	48+24.49	0809L-02-003.000	Land Trust for Miss Coastal Plain	0.22	20,000	4,000
50+43.92	56+11.58	0809L-02-023.000	Land Trust for Miss Coastal Plain	2.96	20,000	59,000
50+43.92	56+11.58	0809L-02-023.001	Land Trust for Miss Coastal Plain	0.14	20,000	3,000
50+43.92	56+11.58	0809L-02-018.000	Land Trust for Miss Coastal Plain	3.10	20,000	62,000
50+43.92	56+11.58	0809L-02-015.000	Land Trust for Miss Coastal Plain	3.10	20,000	62,000
50+43.92	56+11.58	0809L-02-007.000	Land Trust for Miss Coastal Plain	3.10	20,000	62,000
56+56.11	58+15.74	0809L-02-022.000	Land Trust for Miss Coastal Plain	3.10	20,000	62,000
56+56.11	58+15.74	0809L-02-019.000	Land Trust for Miss Coastal Plain	3.10	20,000	62,000
56+56.11	58+15.74	0809L-02-013.000	Land Trust for Miss Coastal Plain	0.14	20,000	3,000
56+56.11	58+15.74	0809L-02-014.000	Land Trust for Miss Coastal Plain	2.09	20,000	42,000
56+56.11	58+15.74	0809L-02-012.001	Land Trust for Miss Coastal Plain	0.29	20,000	6,000
56+56.11	58+15.74	0809L-02-012.000	Land Trust for Miss Coastal Plain	0.22	20,000	4,000
56+56.11	58+15.74	0809L-02-014.001	Land Trust for Miss Coastal Plain	0.39	20,000	8,000
56+56.11	58+15.74	0809L-02-008.000	Land Trust for Miss Coastal Plain	2.63	20,000	53,000
58+15.74	79+90.55	0809L-02-021.000	Land Trust for Miss Coastal Plain	1.50	20,000	30,000
58+15.74	79+90.55	0809L-02-020.000	Land Trust for Miss Coastal Plain	1.55	20,000	31,000
58+15.74	79+90.55	0809L-02-011.000	Land Trust for Miss Coastal Plain	1.78	20,000	36,000

58+15.74	79+90.55	0809L-02-009.000	Land Trust for Miss Coastal Plain	2.18	20,000	44,000
58+15.74	79+90.55	0809L-02-010.000	Land Trust for Miss Coastal Plain	0.36	20,000	7,000
			Construction and Maintenance Easement Total	44.71		\$ 895,000.00
			Total Land Cost			\$ 5,800,000.00

Wetland and Stream Mitigation Cost Estimate

	Length/Area	Unit	Ratio X:1	Credits Required		Cost per Credit	Cost
Wetlands							
Roadway	43	Acre	5.5	236.5	\$	5,000.00	\$ 1,182,500
Stream	3	Acre	5.5	16.5	\$	5,000.00	\$ 82,500
Stormwater Mitigation	40	Acre	5.5	220	\$	5,000.00	\$ 1,100,000
Subtotal							\$ 2,365,000
Stream							
I-10 to Outlet Mall Blvd	1,400	LF	2.6	3640	\$	75.00	\$ 273,000
Outlet Mall Blvd to RR	1,200	LF	2.6	3120	\$	75.00	\$ 234,000
RR to Airport Road Ext	-	LF	2.6	0	\$	75.00	\$ -
Subtotal							\$ 507,000
Total							\$ 2,872,000

Stormwater Mitigation and Restoration Cost Estimate

	Quantity	Unit		Price Per	Cost
Clearing and Grubbing	40	Acre	\$	3,000.00	\$ 120,000
Unclassified Excavation	90,000	CY	\$	15.00	\$ 1,350,000
Excess Excavation	102,600	CY	\$	8.00	\$ 820,800
Clay Pond Liner	24,200	CY	\$	15.00	\$ 363,000
Vegetation	63	Acre	\$	1,000.00	\$ 63,000
Outfall Structure	1	LS	\$	50,000.00	\$ 50,000
Total					\$ 2,766,800
Grand Total					\$ 5,640,000

From: Pulliam, C. Chad <CCPULLIA@southernco.com>
Sent: Wednesday, March 25, 2020 7:44 AM

Subject: Cost Estimates for the BUILD - Interconnecting Gulfport

Please find below our breakdown for the project.

- Estimates of cost for Option 3 (MPC's preferred option) are \$1,000,000 for Transmission and \$200,000 for Distribution. Engineering cost are included in the estimates. CIAC is a tax that we are required to collect on Contributions in Aid of Construction. The current rate is 15.04%.
- The Distribution cost estimates should be fairly close since the proposed plans each similarly impact the same two distribution lines.
- The Transmission cost estimates are very preliminary based on the amount of information that is currently known. MPC is assuming that we will have to raise at least two structures at all of the Transmission lines crossings in order to maintain code required clearance. Once the road design is complete, and the actual heights of roadways, bridges, etc. are known, we will be able to refine the estimates if needed.
- For these type projects we typically ask for a portion of the estimated cost upfront to offset cost of engineering and long lead time materials. At the conclusion of the project, there is a true up. The balance between the actual costs the upfront payment would be settled. We can discuss the initial payment date based on the required construction completion date.
- We are estimating 4-5 months to complete these projects (includes engineering, ordering material, and construction).

Thanks,

Chad

\$1,000,000 - Transmission
+ \$ 200,000 - Distribution
\$1,200,000 - Subtotal
+ \$ 180,480 - CIAC @ 15.04%
\$1,380,480 - Total

\$1,400,000 - Approximate Total

RAILROAD CROSSINGS

PAY ITEM NO.	DESCRIPTION	UNITS	QUANTITY	UNIT PRICE	ITEM TOTAL
*****EARTHWORK ITEMS*****					
RR-1	Median Gates	EA	4	\$ 200,000.00	\$ 800,000.00
RR-2	KCS Insurance & General Requirements	LS	1	\$ 100,000.00	\$ 100,000.00
RR-3	Pre-Cast Concrete Crossing Panels	LF	270	\$ 440.00	\$ 118,800.00
RR-4	Demolition of Existing Crossing	LS	1	\$ 125,000.00	\$ 125,000.00
RR-5	Mobilization	LS	1	\$ 25,000.00	\$ 25,000.00
TOTAL					\$ 1,168,800.00

BUILD Grant - Interconnecting Gulfport Gulfport, MS Opinion of Probable Construction Cost 3-15-2021	
Segment	Opinion of Probable Cost
Poole St	\$ 162,800.00
Old Hwy 49 to Creosote Rd	\$ 3,656,200.00
Creosote Rd Extension	\$ 1,386,400.00
Roundabout #1 to Bridge & Bridge to Roundabout #2	\$ 2,584,400.00
I-10 Bridge	\$ 8,871,000.00
Daniel Blvd Extension	\$ 2,410,900.00
34th Ave & Canal I-10 Service Rd Demo	\$ 187,900.00
Canal I-10 Service Rd Realignment	\$ 1,083,300.00
Roundabout #1 & #2	\$ 723,200.00
SUBTOTAL	\$ 21,066,100.00
<i>CONTINGENCY (10%-)</i>	<i>\$ 2,106,900.00</i>
TOTAL OPINION OF PROBABLE CONSTRUCTION COST	\$ 23,173,000.00
<i>ENGINEERING (12%-)</i>	<i>\$ 2,827,000.00</i>
TOTAL OPINION OF PROBABLE PROJECT COST	\$ 26,000,000.00

Interconnecting Gulfport Gulfport, MS Opinion of Probable Construction Cost 3-15-2021	
ROADWAY LIGHTING	
ROADWAY LIGHTING	\$ 1,895,000.00
<i>CONTINGENCY (10%-)</i>	<i>\$ 190,000.00</i>
TOTAL OPINION OF PROBABLE CONSTRUCTION COST	\$ 2,085,000.00
<i>ENGINEERING (12%-)</i>	<i>\$ 215,000.00</i>
TOTAL OPINION OF PROBABLE PROJECT COST	\$ 2,300,000.00

TOTAL OPINION OF PROBABLE PROJECT COST W/LIGHTING	\$ 28,300,000.00
--	-------------------------

Poole St

PAY ITEM NO.	DESCRIPTION	UNITS	QUANTITY	UNIT PRICE	ITEM TOTAL
*****EARTHWORK ITEMS*****					
201-A001	Clearing and Grubbing	LS	1	\$ 2,500.00	\$ 2,500.00
202-A001	Removal of Obstructions	LS	1	\$ 7,500.00	\$ 7,500.00
203-EX014	Unclassified Excavation	CY	600	\$ 15.00	\$ 9,000.00
203-G001	Excess Excavation, FM, AH	CY	500	\$ 8.00	\$ 4,000.00
209-A004	Geotextile Stabilization, Type V	SY	1,400	\$ 3.00	\$ 4,200.00
212-B001	Standard Ground Preparation	SY	1,200	\$ 2.00	\$ 2,400.00
216-B002	Solid Sodding, Centipede	SY	0	\$ 6.00	\$ -
225-A001	Grassing	AC	0.3	\$ 4,000.00	\$ 1,200.00
234-A001	Temporary Silt Fence	LF	1,000	\$ 3.00	\$ 27,000.00
237-A001	Wattles, 12"	LF	100	\$ 6.00	\$ 3,000.00
TOTAL					\$ 60,800.00
*****BASE & ASPHALT PAVING ITEMS*****					
304-G002	Size 610 Crushed Stone Base, AEA	CY	200	\$ 80.00	\$ 16,000.00
403-A002	12.5-mm, MT, Asphalt Pavement	TON	100	\$ 90.00	\$ 9,000.00
403-A005	19-mm, MT, Asphalt Pavement	TON	100	\$ 90.00	\$ 9,000.00
403-A014	9.5-mm, MT, Asphalt Pavement	TON	200	\$ 100.00	\$ 20,000.00
407-A001	Asphalt for Tack Coat	GAL	400	\$ 5.00	\$ 2,000.00
406-A002	Cold Milling of Bituminous Pavement, All Depths	SY	600	\$ 5.00	\$ 3,000.00
TOTAL					\$ 56,000.00
*****DRAINAGE ITEMS*****					
601-B003	Class "B" Structural Concrete, Minor Structures	CY	0	\$ 1,400.00	\$ -
602-A001	Reinforcing Steel	LB	0	\$ 2.00	\$ -
603-CA011	18" Reinforced Concrete Pipe, Class III	LF	200	\$ 40.00	\$ 8,000.00
603-CA026	24" Reinforced Concrete Pipe, Class III	LF	0	\$ 50.00	\$ -
603-CB011	18" Reinforced Concrete Pipe End Section	EA	10	\$ 800.00	\$ 8,000.00
604-A001	Castings	LB	0	\$ 4.00	\$ -
604-B001	Gratings	LB	0	\$ 4.00	\$ -
305-B004	Size II Stabilizer Aggregate, Coarse	CY	100	\$ 65.00	\$ 6,500.00
TOTAL					\$ 22,500.00
*****INCIDENTAL CONSTRUCTION ITEMS*****					
608-A001	Concrete Sidewalk, Without Reinforcement	SY	0	\$ 45.00	\$ -
609-D002	Combination Concrete Curb and Gutter Type 1 Modified	LF	0	\$ 18.00	\$ -
613-A001	Adjustment of Castings, Gratings & Utility Appurtenances	LS	1	\$ 2,500.00	\$ 2,500.00
618-A001	Maintenance of Traffic	LS	1	\$ 2,500.00	\$ 2,500.00
620-A001	Mobilization	LS	1	\$ 10,000.00	\$ 10,000.00
699-A001	Roadway Construction Stakes	LS	1	\$ 2,500.00	\$ 2,500.00
TOTAL					\$ 17,500.00
*****PAVEMENT MARKING ITEMS*****					
625-XXXX	Pavement Markings	LS	1	\$ 2,500.00	\$ 2,500.00
TOTAL					\$ 2,500.00
*****TRAFFIC CONTROL DEVICES*****					
XXX-XXXX	RR Crossing	EA	0	\$ 250,000.00	\$ -
XXX-XXXX	Roadway Signage	LS	1	\$ 1,500.00	\$ 1,500.00
TOTAL					\$ 1,500.00
*****ROADSIDE DEVELOPMENT ITEMS*****					
XXX-XXXX	Hardscape	LS	1	\$ 1,000.00	\$ 1,000.00
XXX-XXXX	Landscape	LS	1	\$ 1,000.00	\$ 1,000.00
TOTAL					\$ 2,000.00
SEGMENT TOTAL					\$ 162,800.00

OLD HWY 49 TO CREOSOTE RD

PAY ITEM NO.	DESCRIPTION	UNITS	QUANTITY	UNIT PRICE	ITEM TOTAL
*****EARTHWORK ITEMS*****					
201-A001	Clearing and Grubbing	LS	1	\$ 110,000.00	\$ 110,000.00
202-A001	Removal of Obstructions	LS	1	\$ 5,000.00	\$ 5,000.00
203-EX013	Borrow Excavation, FM, AH	CY	5,500	\$ 15.00	\$ 82,500.00
203-EX014	Unclassified Excavation	CY	18,800	\$ 15.00	\$ 282,000.00
203-G001	Excess Excavation, FM, AH	CY	14,000	\$ 8.00	\$ 112,000.00
209-A004	Geotextile Stabilization, Type V	SY	19,900	\$ 3.00	\$ 59,700.00
XXX-XXXX	Ditch Grading	LS	1	\$ 100,000.00	\$ 100,000.00
212-B001	Standard Ground Preparation	SY	46,000	\$ 2.00	\$ 92,000.00
216-B002	Solid Sodding, Centipede	SY	10,300	\$ 6.00	\$ 61,800.00
225-A001	Grassing	AC	7.4	\$ 4,000.00	\$ 29,600.00
234-A001	Temporary Silt Fence	LF	8,800	\$ 3.00	\$ 27,000.00
237-A001	Wattles, 12"	LF	500	\$ 6.00	\$ 3,000.00
TOTAL					\$ 964,600.00
*****BASE & ASPHALT PAVING ITEMS*****					
304-G002	Size 610 Crushed Stone Base, AEA	CY	3,400	\$ 80.00	\$ 272,000.00
403-A002	12.5-mm, MT, Asphalt Pavement	TON	1,400	\$ 90.00	\$ 126,000.00
403-A005	19-mm, MT, Asphalt Pavement	TON	1,400	\$ 90.00	\$ 126,000.00
403-A014	9.5-mm, MT, Asphalt Pavement	TON	2,800	\$ 100.00	\$ 280,000.00
407-A001	Asphalt for Tack Coat	GAL	3,100	\$ 5.00	\$ 15,500.00
TOTAL					\$ 819,500.00
*****DRAINAGE ITEMS*****					
601-B003	Class "B" Structural Concrete, Minor Structures	CY	20	\$ 1,400.00	\$ 28,000.00
602-A001	Reinforcing Steel	LB	3,000	\$ 2.00	\$ 6,000.00
603-CA026	24" Reinforced Concrete Pipe, Class III	LF	600	\$ 50.00	\$ 30,000.00
603-CA027	36" Reinforced Concrete Pipe, Class III	LF	200	\$ 65.00	\$ 13,000.00
603-PA008	8' x 6' Precast Box Culvert	LF	460	\$ 800.00	\$ 368,000.00
603-PB008	8' x 6' Precast Box Culvert End Section	EA	8	\$ 5,000.00	\$ 40,000.00
604-A001	Castings	LB	2,000	\$ 4.00	\$ 8,000.00
604-B001	Gratings	LB	800	\$ 4.00	\$ 3,200.00
305-B004	Size II Stabilizer Aggregate, Coarse	CY	300	\$ 65.00	\$ 19,500.00
TOTAL					\$ 515,700.00
*****UTILITY ITEMS*****					
603-A0XX	16" Steel Pipe, Jacked or Bored (8" Sewer Casing, 2 Crossings)	LF	200	\$ 450.00	\$ 90,000.00
603-A0XX	24" Steel Pipe, Jacked or Bored (12" Water Casing, 2 Crossings)	LF	200	\$ 600.00	\$ 120,000.00
TOTAL					\$ 210,000.00
*****INCIDENTAL CONSTRUCTION ITEMS*****					
608-A001	Concrete Sidewalk, Without Reinforcement	SY	7400	\$ 45.00	\$ 333,000.00
609-D002	Combination Concrete Curb and Gutter Type 1 Modified	LF	8,800	\$ 18.00	\$ 158,400.00
613-A001	Adjustment of Castings, Gratings & Utility Appurtenances	LS	1	\$ 2,500.00	\$ 2,500.00
618-A001	Maintenance of Traffic	LS	1	\$ 2,500.00	\$ 2,500.00
620-A001	Mobilization	LS	1	\$ 50,000.00	\$ 50,000.00
699-A001	Roadway Construction Stakes	LS	1	\$ 25,000.00	\$ 25,000.00
TOTAL					\$ 571,400.00
*****PAVEMENT MARKING ITEMS*****					
625-XXXX	Pavement Markings	LS	1	\$ 50,000.00	\$ 50,000.00
TOTAL					\$ 50,000.00
*****TRAFFIC CONTROL DEVICES*****					
XXX-XXXX	RR Crossing	EA	2	\$ 250,000.00	\$ 500,000.00
XXX-XXXX	Roadway Signage	LS	1	\$ 5,000.00	\$ 5,000.00
TOTAL					\$ 505,000.00
*****ROADSIDE DEVELOPMENT ITEMS*****					
XXX-XXXX	Hardscape	LS	1	\$ 10,000.00	\$ 10,000.00
XXX-XXXX	Landscape	LS	1	\$ 10,000.00	\$ 10,000.00
TOTAL					\$ 20,000.00
SEGMENT TOTAL					\$ 3,656,200.00

CREOSOTE ROAD EXTENSION

PAY ITEM NO.	DESCRIPTION	UNITS	QUANTITY	UNIT PRICE	ITEM TOTAL
*****EARTHWORK ITEMS*****					
201-A001	Clearing and Grubbing	LS	1	\$ 50,000.00	\$ 50,000.00
202-A001	Removal of Obstructions	LS	1	\$ 5,000.00	\$ 5,000.00
203-EX014	Unclassified Excavation	CY	12,400	\$ 15.00	\$ 186,000.00
203-G001	Excess Excavation, FM, AH	CY	5,900	\$ 8.00	\$ 47,200.00
209-A004	Geotextile Stabilization, Type V	SY	8,200	\$ 3.00	\$ 24,600.00
212-B001	Standard Ground Preparation	SY	13,600	\$ 2.00	\$ 27,200.00
216-B002	Solid Sodding, Centipede	SY	4,800	\$ 6.00	\$ 28,800.00
225-A001	Grassing	AC	1.9	\$ 4,000.00	\$ 7,600.00
234-A001	Temporary Silt Fence	LF	3,300	\$ 3.00	\$ 27,000.00
237-A001	Wattles, 12"	LF	200	\$ 6.00	\$ 3,000.00
TOTAL					\$ 406,400.00
*****BASE & ASPHALT PAVING ITEMS*****					
304-G002	Size 610 Crushed Stone Base, AEA	CY	1,400	\$ 80.00	\$ 112,000.00
403-A002	12.5-mm, MT, Asphalt Pavement	TON	600	\$ 90.00	\$ 54,000.00
403-A005	19-mm, MT, Asphalt Pavement	TON	600	\$ 90.00	\$ 54,000.00
403-A014	9.5-mm, MT, Asphalt Pavement	TON	1,200	\$ 100.00	\$ 120,000.00
407-A001	Asphalt for Tack Coat	GAL	1,300	\$ 5.00	\$ 6,500.00
TOTAL					\$ 346,500.00
*****DRAINAGE ITEMS*****					
601-B003	Class "B" Structural Concrete, Minor Structures	CY	10	\$ 1,400.00	\$ 14,000.00
602-A001	Reinforcing Steel	LB	1,500	\$ 2.00	\$ 3,000.00
603-CA026	24" Reinforced Concrete Pipe, Class III	LF	500	\$ 50.00	\$ 25,000.00
603-PA008	8' x 6' Precast Box Culvert	LF	390	\$ 800.00	\$ 312,000.00
603-PB008	8' x 6' Precast Box Culvert End Section	EA	6	\$ 5,000.00	\$ 30,000.00
604-A001	Castings	LB	1,000	\$ 4.00	\$ 4,000.00
604-B001	Gratings	LB	400	\$ 4.00	\$ 1,600.00
305-B004	Size II Stabilizer Aggregate, Coarse	CY	100	\$ 65.00	\$ 6,500.00
TOTAL					\$ 396,100.00
*****INCIDENTAL CONSTRUCTION ITEMS*****					
608-A001	Concrete Sidewalk, Without Reinforcement	SY	1,900	\$ 45.00	\$ 85,500.00
609-D002	Combination Concrete Curb and Gutter Type 1 Modified	LF	3,300	\$ 18.00	\$ 59,400.00
613-A001	Adjustment of Castings, Gratings & Utility Appurtenances	LS	1	\$ 5,000.00	\$ 5,000.00
618-A001	Maintenance of Traffic	LS	1	\$ 5,000.00	\$ 5,000.00
620-A001	Mobilization	LS	1	\$ 25,000.00	\$ 25,000.00
699-A001	Roadway Construction Stakes	LS	1	\$ 10,000.00	\$ 10,000.00
TOTAL					\$ 189,900.00
*****PAVEMENT MARKING ITEMS*****					
625-XXXX	Pavement Markings	LS	1	\$ 25,000.00	\$ 25,000.00
TOTAL					\$ 25,000.00
*****TRAFFIC CONTROL DEVICES*****					
XXX-XXXX	Roadway Signage	LS	1	\$ 2,500.00	\$ 2,500.00
TOTAL					\$ 2,500.00
*****ROADSIDE DEVELOPMENT ITEMS*****					
XXX-XXXX	Hardscape	LS	1	\$ 10,000.00	\$ 10,000.00
XXX-XXXX	Landscape	LS	1	\$ 10,000.00	\$ 10,000.00
TOTAL					\$ 20,000.00
SEGMENT TOTAL					\$ 1,386,400.00

ROUNDAABOUT #1 TO BRIDGE & BRIDGE TO ROUNDAABOUT #2

PAY ITEM NO.	DESCRIPTION	UNITS	QUANTITY	UNIT PRICE	ITEM TOTAL
*****EARTHWORK ITEMS*****					
201-A001	Clearing and Grubbing	LS	1	\$ 50,000.00	\$ 50,000.00
202-A001	Removal of Obstructions	LS	1	\$ 5,000.00	\$ 5,000.00
203-EX013	Borrow Excavation, FM, AH	CY	58,100	\$ 15.00	\$ 871,500.00
203-EX014	Unclassified Excavation	CY	24,200	\$ 15.00	\$ 363,000.00
203-G001	Excess Excavation, FM, AH	CY	8,400	\$ 8.00	\$ 67,200.00
209-A004	Geotextile Stabilization, Type V	SY	10,100	\$ 3.00	\$ 30,300.00
212-B001	Standard Ground Preparation	SY	30,400	\$ 2.00	\$ 60,800.00
216-B002	Solid Sodding, Centipede	SY	6,300	\$ 6.00	\$ 37,800.00
225-A001	Grassing	AC	5.0	\$ 4,000.00	\$ 20,000.00
234-A001	Temporary Silt Fence	LF	3,700	\$ 3.00	\$ 27,000.00
237-A001	Wattles, 12"	LF	200	\$ 6.00	\$ 3,000.00
TOTAL					\$ 1,535,600.00
*****BASE & ASPHALT PAVING ITEMS*****					
304-G002	Size 610 Crushed Stone Base, AEA	CY	1,700	\$ 80.00	\$ 136,000.00
403-A002	12.5-mm, MT, Asphalt Pavement	TON	900	\$ 90.00	\$ 81,000.00
403-A005	19-mm, MT, Asphalt Pavement	TON	900	\$ 90.00	\$ 81,000.00
403-A014	9.5-mm, MT, Asphalt Pavement	TON	1,800	\$ 100.00	\$ 180,000.00
407-A001	Asphalt for Tack Coat	GAL	2,000	\$ 5.00	\$ 10,000.00
TOTAL					\$ 488,000.00
*****DRAINAGE ITEMS*****					
601-B003	Class "B" Structural Concrete, Minor Structures	CY	40	\$ 1,400.00	\$ 56,000.00
602-A001	Reinforcing Steel	LB	6,000	\$ 2.00	\$ 12,000.00
603-CA011	18" Reinforced Concrete Pipe, Class III	LF	1,000	\$ 40.00	\$ 40,000.00
603-CA026	24" Reinforced Concrete Pipe, Class III	LF	1,000	\$ 50.00	\$ 50,000.00
603-CA055	36" Reinforced Concrete Pipe, Class III	LF	0	\$ 65.00	\$ -
604-A001	Castings	LB	4,000	\$ 4.00	\$ 16,000.00
604-B001	Gratings	LB	1,600	\$ 4.00	\$ 6,400.00
305-B004	Size II Stabilizer Aggregate, Coarse	CY	300	\$ 65.00	\$ 19,500.00
TOTAL					\$ 199,900.00
*****INCIDENTAL CONSTRUCTION ITEMS*****					
608-A001	Concrete Sidewalk, Without Reinforcement	SY	3,100	\$ 45.00	\$ 139,500.00
609-D002	Combination Concrete Curb and Gutter Type 1 Modified	LF	7,300	\$ 18.00	\$ 131,400.00
613-A001	Adjustment of Castings, Gratings & Utility Appurtenances	LS	1	\$ 5,000.00	\$ 5,000.00
618-A001	Maintenance of Traffic	LS	1	\$ 2,500.00	\$ 2,500.00
620-A001	Mobilization	LS	1	\$ 25,000.00	\$ 25,000.00
699-A001	Roadway Construction Stakes	LS	1	\$ 10,000.00	\$ 10,000.00
TOTAL					\$ 313,400.00
*****PAVEMENT MARKING ITEMS*****					
625-XXXX	Pavement Markings	LS	1	\$ 25,000.00	\$ 25,000.00
TOTAL					\$ 25,000.00
*****TRAFFIC CONTROL DEVICES*****					
XXX-XXXX	Roadway Signage	LS	1	\$ 2,500.00	\$ 2,500.00
TOTAL					\$ 2,500.00
*****ROADSIDE DEVELOPMENT ITEMS*****					
XXX-XXXX	Hardscape	LS	1	\$ 10,000.00	\$ 10,000.00
XXX-XXXX	Landscape	LS	1	\$ 10,000.00	\$ 10,000.00
TOTAL					\$ 20,000.00
SEGMENT TOTAL					\$ 2,584,400.00

I-10 BRIDGE

PAY ITEM NO.	DESCRIPTION	UNITS	QUANTITY	UNIT PRICE	ITEM TOTAL
*****EARTHWORK ITEMS*****					
203-EX014	Unclassified Excavation	CY	5,400	\$ 15.00	\$ 81,000.00
TOTAL					\$ 81,000.00
*****INCIDENTAL CONSTRUCTION ITEMS*****					
618-A001	Maintenance of Traffic	LS	1	\$ 100,000.00	\$ 100,000.00
620-A001	Mobilization	LS	1	\$ 25,000.00	\$ 25,000.00
TOTAL					\$ 125,000.00
*****PAVEMENT MARKING ITEMS*****					
625-XXXX	Pavement Markings	LS	1	\$ 10,000.00	\$ 10,000.00
TOTAL					\$ 10,000.00
*****TRAFFIC CONTROL DEVICES*****					
XXX-XXXX	Roadway Signage	LS	1	\$ 1,000.00	\$ 1,000.00
TOTAL					\$ 1,000.00
*****ROADWAY LIGHTING ITEMS*****					
XXX-XXXX	Lighting Assembly, Single Head (with receptacles)	EA	16	\$ 14,000.00	\$ 224,000.00
684-B007	Pole Foundation, 30" Diameter	EA	40	\$ 750.00	\$ 30,000.00
TOTAL					\$ 254,000.00
*****BRIDGE AND STRUCTURE ITEMS*****					
815-D001	Concrete Slope Paving	CY	200	\$ 500.00	\$ 100,000.00
810-XXXX	Prestressed Concrete Beam Bridge Structure (Girders, Deck, Rails, Bents, Abutments, etc.)	SF	56,000	\$ 150.00	\$ 8,400,000.00
TOTAL					\$ 8,400,000.00
SEGMENT TOTAL					\$ 8,871,000.00

DANIEL BLVD EXTENSION

PAY ITEM NO.	DESCRIPTION	UNITS	QUANTITY	UNIT PRICE	ITEM TOTAL
*****EARTHWORK ITEMS*****					
201-A001	Clearing and Grubbing	LS	1	\$ 80,000.00	\$ 80,000.00
202-A001	Removal of Obstructions	LS	1	\$ 10,000.00	\$ 10,000.00
203-EX014	Unclassified Excavation	CY	23,900	\$ 15.00	\$ 358,500.00
203-G001	Excess Excavation, FM, AH	CY	23,000	\$ 8.00	\$ 184,000.00
209-A004	Geotextile Stabilization, Type V	SY	17,200	\$ 3.00	\$ 51,600.00
212-B001	Standard Ground Preparation	SY	15,900	\$ 2.00	\$ 31,800.00
216-B002	Solid Sodding, Centipede	SY	10,700	\$ 6.00	\$ 64,200.00
225-A001	Grassing	AC	1.1	\$ 4,000.00	\$ 4,400.00
234-A001	Temporary Silt Fence	LF	6,200	\$ 3.00	\$ 27,000.00
237-A001	Wattles, 12"	LF	400	\$ 6.00	\$ 3,000.00
TOTAL					\$ 814,500.00
*****BASE & ASPHALT PAVING ITEMS*****					
304-G002	Size 610 Crushed Stone Base, AEA	CY	2,900	\$ 80.00	\$ 232,000.00
403-A002	12.5-mm, MT, Asphalt Pavement	TON	1,500	\$ 90.00	\$ 135,000.00
403-A005	19-mm, MT, Asphalt Pavement	TON	1,500	\$ 90.00	\$ 135,000.00
403-A014	9.5-mm, MT, Asphalt Pavement	TON	3,000	\$ 100.00	\$ 300,000.00
407-A001	Asphalt for Tack Coat	GAL	3,400	\$ 5.00	\$ 17,000.00
TOTAL					\$ 819,000.00
*****DRAINAGE ITEMS*****					
601-B003	Class "B" Structural Concrete, Minor Structures	CY	20	\$ 1,400.00	\$ 28,000.00
602-A001	Reinforcing Steel	LB	3,000	\$ 2.00	\$ 6,000.00
603-CA011	18" Reinforced Concrete Pipe, Class III	LF	1,600	\$ 40.00	\$ 64,000.00
603-CA026	24" Reinforced Concrete Pipe, Class III	LF	800	\$ 50.00	\$ 40,000.00
603-CA055	36" Reinforced Concrete Pipe, Class III	LF	800	\$ 65.00	\$ 52,000.00
604-A001	Castings	LB	2,000	\$ 4.00	\$ 8,000.00
604-B001	Gratings	LB	800	\$ 4.00	\$ 3,200.00
305-B004	Size II Stabilizer Aggregate, Coarse	CY	600	\$ 65.00	\$ 39,000.00
TOTAL					\$ 240,200.00
*****INCIDENTAL CONSTRUCTION ITEMS*****					
608-A001	Concrete Sidewalk, Without Reinforcement	SY	5,200	\$ 45.00	\$ 234,000.00
609-D002	Combination Concrete Curb and Gutter Type 1 Modified	LF	12,400	\$ 18.00	\$ 223,200.00
613-A001	Adjustment of Castings, Gratings & Utility Appurtenances	LS	1	\$ 5,000.00	\$ 5,000.00
618-A001	Maintenance of Traffic	LS	1	\$ 2,500.00	\$ 2,500.00
620-A001	Mobilization	LS	1	\$ 25,000.00	\$ 25,000.00
699-A001	Roadway Construction Stakes	LS	1	\$ 10,000.00	\$ 10,000.00
TOTAL					\$ 499,700.00
*****PAVEMENT MARKING ITEMS*****					
625-XXXX	Pavement Markings	LS	1	\$ 25,000.00	\$ 25,000.00
TOTAL					\$ 25,000.00
*****TRAFFIC CONTROL DEVICES*****					
XXX-XXXX	Roadway Signage	LS	1	\$ 2,500.00	\$ 2,500.00
TOTAL					\$ 2,500.00
*****ROADSIDE DEVELOPMENT ITEMS*****					
XXX-XXXX	Hardscape	LS	1	\$ 5,000.00	\$ 5,000.00
XXX-XXXX	Landscape	LS	1	\$ 5,000.00	\$ 5,000.00
TOTAL					\$ 10,000.00
SEGMENT TOTAL					\$ 2,410,900.00

34TH AVENUE

PAY ITEM NO.	DESCRIPTION	UNITS	QUANTITY	UNIT PRICE	ITEM TOTAL
*****EARTHWORK ITEMS*****					
201-A001	Clearing and Grubbing	LS	1	\$ 1,500.00	\$ 1,500.00
202-A001	Removal of Obstructions	LS	1	\$ 2,500.00	\$ 2,500.00
202-B188	Removal of Pavement, All Types and Depths	SY	6,200	\$ 5.00	\$ 31,000.00
203-EX014	Unclassified Excavation	CY	600	\$ 15.00	\$ 9,000.00
203-G001	Excess Excavation, FM, AH	CY	600	\$ 8.00	\$ 4,800.00
209-A004	Geotextile Stabilization, Type V	SY	800	\$ 3.00	\$ 2,400.00
212-B001	Standard Ground Preparation	SY	9,000	\$ 2.00	\$ 18,000.00
225-A001	Grassing	AC	1.9	\$ 4,000.00	\$ 7,600.00
234-A001	Temporary Silt Fence	LF	6,100	\$ 3.00	\$ 27,000.00
237-A001	Wattles, 12"	LF	700	\$ 6.00	\$ 3,000.00
TOTAL					\$ 106,800.00
*****BASE & ASPHALT PAVING ITEMS*****					
304-G002	Size 610 Crushed Stone Base, AEA	CY	140	\$ 80.00	\$ 11,200.00
403-A002	12.5-mm, MT, Asphalt Pavement	TON	40	\$ 90.00	\$ 3,600.00
403-A005	19-mm, MT, Asphalt Pavement	TON	70	\$ 90.00	\$ 6,300.00
403-A014	9.5-mm, MT, Asphalt Pavement	TON	210	\$ 100.00	\$ 21,000.00
406-A002	Cold Milling of Bituminous Pavement, All Depths	SY	1,300	\$ 5.00	\$ 6,500.00
407-A001	Asphalt for Tack Coat	GAL	1,400	\$ 5.00	\$ 7,000.00
TOTAL					\$ 55,600.00
*****INCIDENTAL CONSTRUCTION ITEMS*****					
613-A001	Adjustment of Castings, Gratings & Utility Appurtenances	LS	1	\$ 2,500.00	\$ 2,500.00
618-A001	Maintenance of Traffic	LS	1	\$ 2,500.00	\$ 2,500.00
620-A001	Mobilization	LS	1	\$ 10,000.00	\$ 10,000.00
699-A001	Roadway Construction Stakes	LS	1	\$ 2,500.00	\$ 2,500.00
TOTAL					\$ 17,500.00
*****PAVEMENT MARKING ITEMS*****					
625-XXXX	Pavement Markings	LS	1	\$ 5,000.00	\$ 5,000.00
TOTAL					\$ 5,000.00
*****TRAFFIC CONTROL DEVICES*****					
XXX-XXXX	Roadway Signage	LS	1	\$ 1,000.00	\$ 1,000.00
TOTAL					\$ 1,000.00
*****ROADSIDE DEVELOPMENT ITEMS*****					
XXX-XXXX	Hardscape	LS	1	\$ 1,000.00	\$ 1,000.00
XXX-XXXX	Landscape	LS	1	\$ 1,000.00	\$ 1,000.00
TOTAL					\$ 2,000.00
SEGMENT TOTAL					\$ 187,900.00

CANAL ROAD I-10 SERVICE ROAD REALIGNMENT

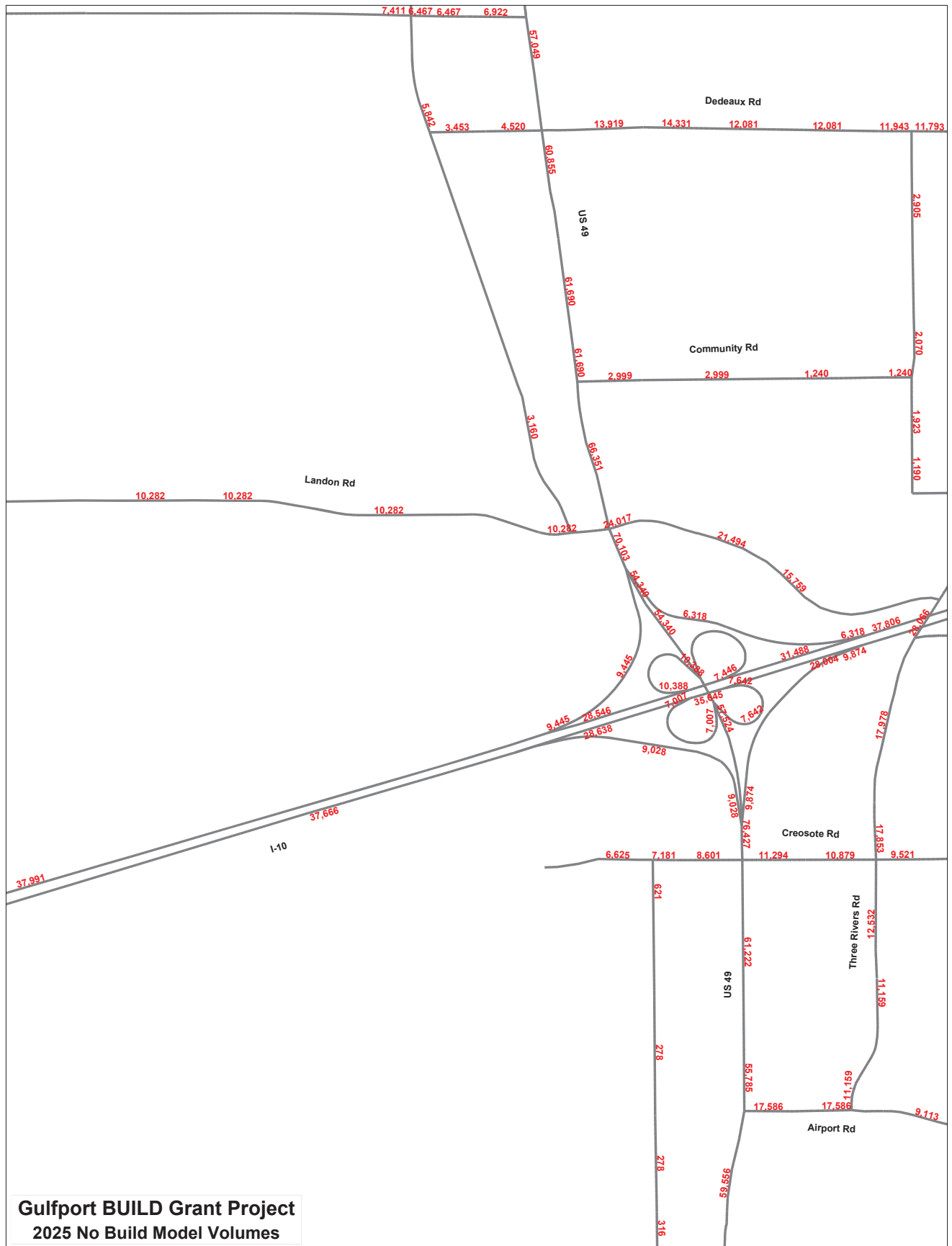
PAY ITEM NO.	DESCRIPTION	UNITS	QUANTITY	UNIT PRICE	ITEM TOTAL
*****EARTHWORK ITEMS*****					
201-A001	Clearing and Grubbing	LS	1	\$ 70,000.00	\$ 70,000.00
202-A001	Removal of Obstructions	LS	1	\$ 5,000.00	\$ 5,000.00
203-EX014	Borrow Excavation, AH, FME, Class B5	CY	11,600	\$ 15.00	\$ 174,000.00
203-G001	Excess Excavation, FM, AH	CY	11,600	\$ 8.00	\$ 92,800.00
209-A004	Geotextile Stabilization, Type V	SY	8,100	\$ 3.00	\$ 24,300.00
212-B001	Standard Ground Preparation	SY	18,000	\$ 2.00	\$ 36,000.00
225-A001	Grassing	AC	3.8	\$ 4,000.00	\$ 15,200.00
234-A001	Temporary Silt Fence	LF	5,400	\$ 3.00	\$ 27,000.00
237-A001	Wattles, 12"	LF	300	\$ 6.00	\$ 3,000.00
TOTAL					\$ 447,300.00
*****BASE & ASPHALT PAVING ITEMS*****					
304-G002	Size 610 Crushed Stone Base, AEA	CY	1,900	\$ 80.00	\$ 152,000.00
403-A002	12.5-mm, MT, Asphalt Pavement	TON	700	\$ 90.00	\$ 63,000.00
403-A005	19-mm, MT, Asphalt Pavement	TON	700	\$ 90.00	\$ 63,000.00
403-A014	9.5-mm, MT, Asphalt Pavement	TON	1,400	\$ 100.00	\$ 140,000.00
407-A001	Asphalt for Tack Coat	GAL	1,600	\$ 5.00	\$ 8,000.00
TOTAL					\$ 426,000.00
*****INCIDENTAL CONSTRUCTION ITEMS*****					
608-A001	Concrete Sidewalk, Without Reinforcement	SY	3000	\$ 45.00	\$ 135,000.00
613-A001	Adjustment of Castings, Gratings & Utility Appurtenances	LS	1	\$ 2,500.00	\$ 2,500.00
618-A001	Maintenance of Traffic	LS	1	\$ 5,000.00	\$ 5,000.00
620-A001	Mobilization	LS	1	\$ 25,000.00	\$ 25,000.00
699-A001	Roadway Construction Stakes	LS	1	\$ 10,000.00	\$ 10,000.00
TOTAL					\$ 177,500.00
*****PAVEMENT MARKING ITEMS*****					
625-XXXX	Pavement Markings	LS	1	\$ 25,000.00	\$ 25,000.00
TOTAL					\$ 25,000.00
*****TRAFFIC CONTROL DEVICES*****					
XXX-XXXX	Roadway Signage	LS	1	\$ 2,500.00	\$ 2,500.00
TOTAL					\$ 2,500.00
*****ROADSIDE DEVELOPMENT ITEMS*****					
XXX-XXXX	Hardscape	LS	1	\$ 2,500.00	\$ 2,500.00
XXX-XXXX	Landscape	LS	1	\$ 2,500.00	\$ 2,500.00
TOTAL					\$ 5,000.00
SEGMENT TOTAL					\$ 1,083,300.00

ROUNDBABOUTS #1 & #2

PAY ITEM NO.	DESCRIPTION	UNITS	QUANTITY	UNIT PRICE	ITEM TOTAL
*****EARTHWORK ITEMS*****					
201-A001	Clearing and Grubbing	LS	1	\$ 10,000.00	\$ 10,000.00
202-A001	Removal of Obstructions	LS	1	\$ 1,000.00	\$ 1,000.00
203-EX014	Unclassified Excavation	CY	4,100	\$ 15.00	\$ 61,500.00
203-G001	Excess Excavation, FM, AH	CY	2,400	\$ 8.00	\$ 19,200.00
209-A004	Geotextile Stabilization, Type V	SY	2,700	\$ 3.00	\$ 8,100.00
212-B001	Standard Ground Preparation	SY	1,900	\$ 2.00	\$ 3,800.00
216-B002	Solid Sodding, Centipede	SY	1,100	\$ 6.00	\$ 6,600.00
225-A001	Grassing	AC	0.2	\$ 4,000.00	\$ 800.00
234-A001	Temporary Silt Fence	LF	800	\$ 3.00	\$ 2,400.00
237-A001	Wattles, 12"	LF	80	\$ 6.00	\$ 480.00
TOTAL					\$ 141,000.00
*****BASE & ASPHALT/CONCRETE PAVING ITEMS*****					
304-G002	Size 610 Crushed Stone Base, AEA	CY	450	\$ 80.00	\$ 36,000.00
403-A002	12.5-mm, MT, Asphalt Pavement	TON	160	\$ 90.00	\$ 14,400.00
403-A005	19-mm, MT, Asphalt Pavement	TON	160	\$ 90.00	\$ 14,400.00
403-A014	9.5-mm, MT, Asphalt Pavement	TON	310	\$ 100.00	\$ 31,000.00
407-A001	Asphalt for Tack Coat	GAL	340	\$ 5.00	\$ 1,700.00
501-A001	6" Reinforced Cement Concrete Pavement, Broom Finish	SY	680	\$ 90.00	\$ 61,200.00
TOTAL					\$ 158,700.00
*****INCIDENTAL CONSTRUCTION ITEMS*****					
608-A001	Concrete Sidewalk, Without Reinforcement	SY	480	\$ 45.00	\$ 21,600.00
609-D002	Combination Concrete Curb and Gutter Type 1 Modified	LF	1,100	\$ 18.00	\$ 19,800.00
613-A001	Adjustment of Castings, Gratings & Utility Appurtenances	LS	1	\$ 1,000.00	\$ 1,000.00
618-A001	Maintenance of Traffic	LS	1	\$ 1,000.00	\$ 1,000.00
620-A001	Mobilization	LS	1	\$ 5,000.00	\$ 5,000.00
699-A001	Roadway Construction Stakes	LS	1	\$ 2,500.00	\$ 2,500.00
TOTAL					\$ 50,900.00
*****PAVEMENT MARKING ITEMS*****					
625-XXXX	Pavement Markings	LS	1	\$ 5,000.00	\$ 5,000.00
TOTAL					\$ 5,000.00
*****TRAFFIC CONTROL DEVICES*****					
XXX-XXXX	Roadway Signage	LS	1	\$ 1,000.00	\$ 1,000.00
TOTAL					\$ 1,000.00
*****ROADSIDE DEVELOPMENT ITEMS*****					
XXX-XXXX	Hardscape	LS	1	\$ 2,500.00	\$ 2,500.00
XXX-XXXX	Landscape	LS	1	\$ 2,500.00	\$ 2,500.00
TOTAL					\$ 5,000.00
ROUNDBABOUT #1 TOTAL					\$ 361,600.00
ROUNDBABOUT #2 TOTAL					\$ 361,600.00
SEGMENT TOTAL					\$ 723,200.00

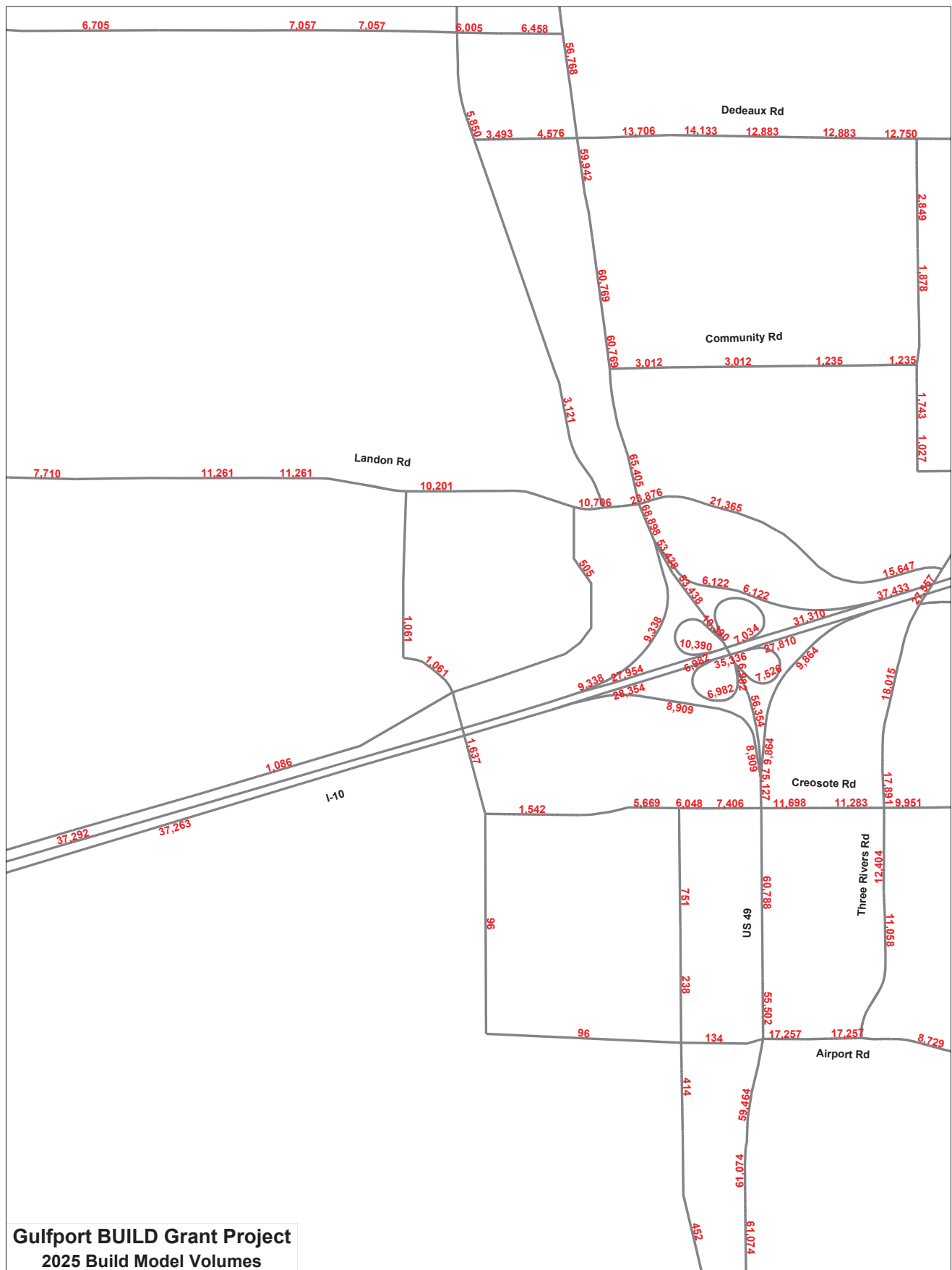
Appendix B

Gulf Regional Planning Commission Traffic Model 2025 No Build



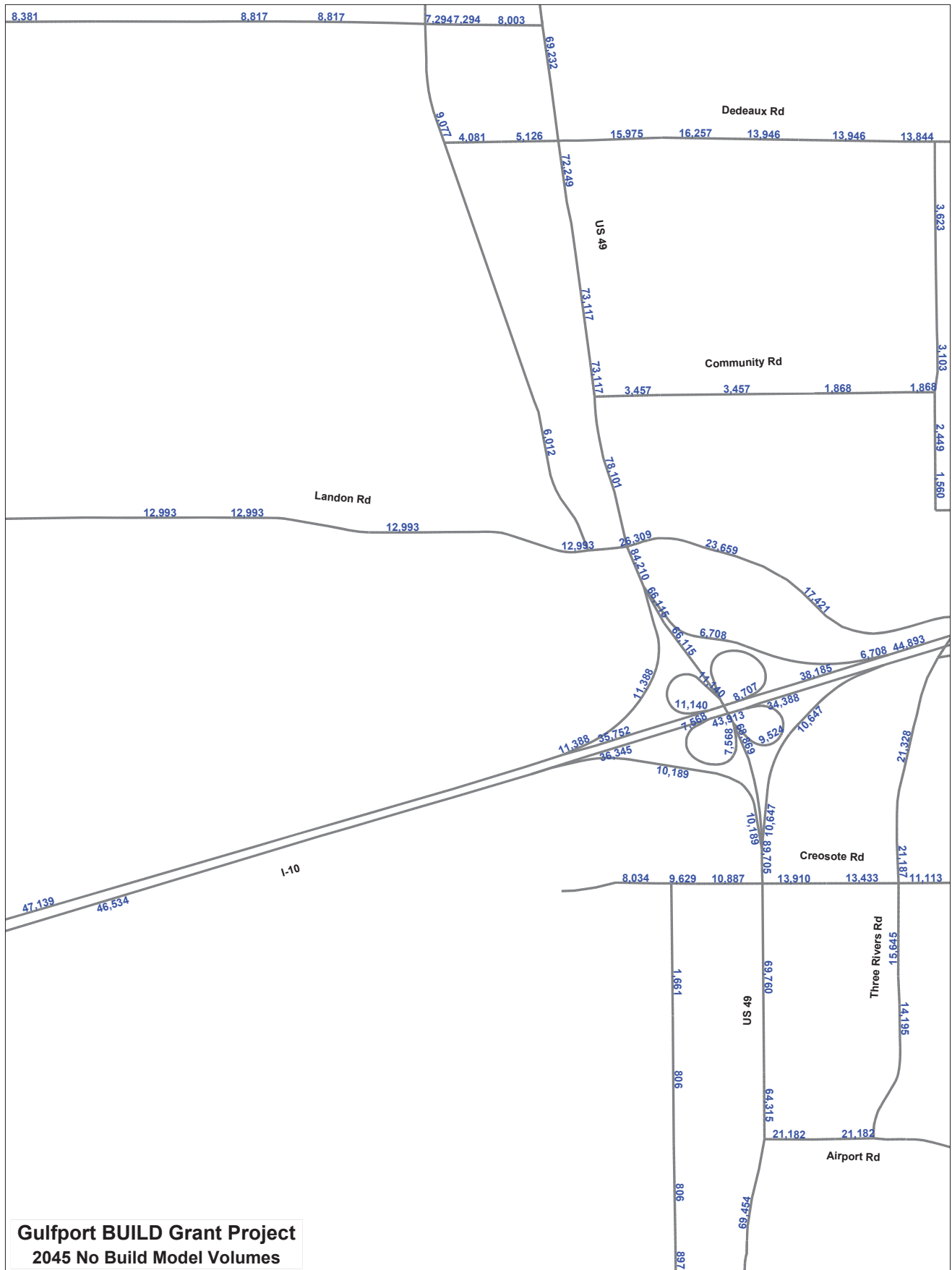
Appendix B

Gulf Regional Planning Commission Traffic Model 2025 Build



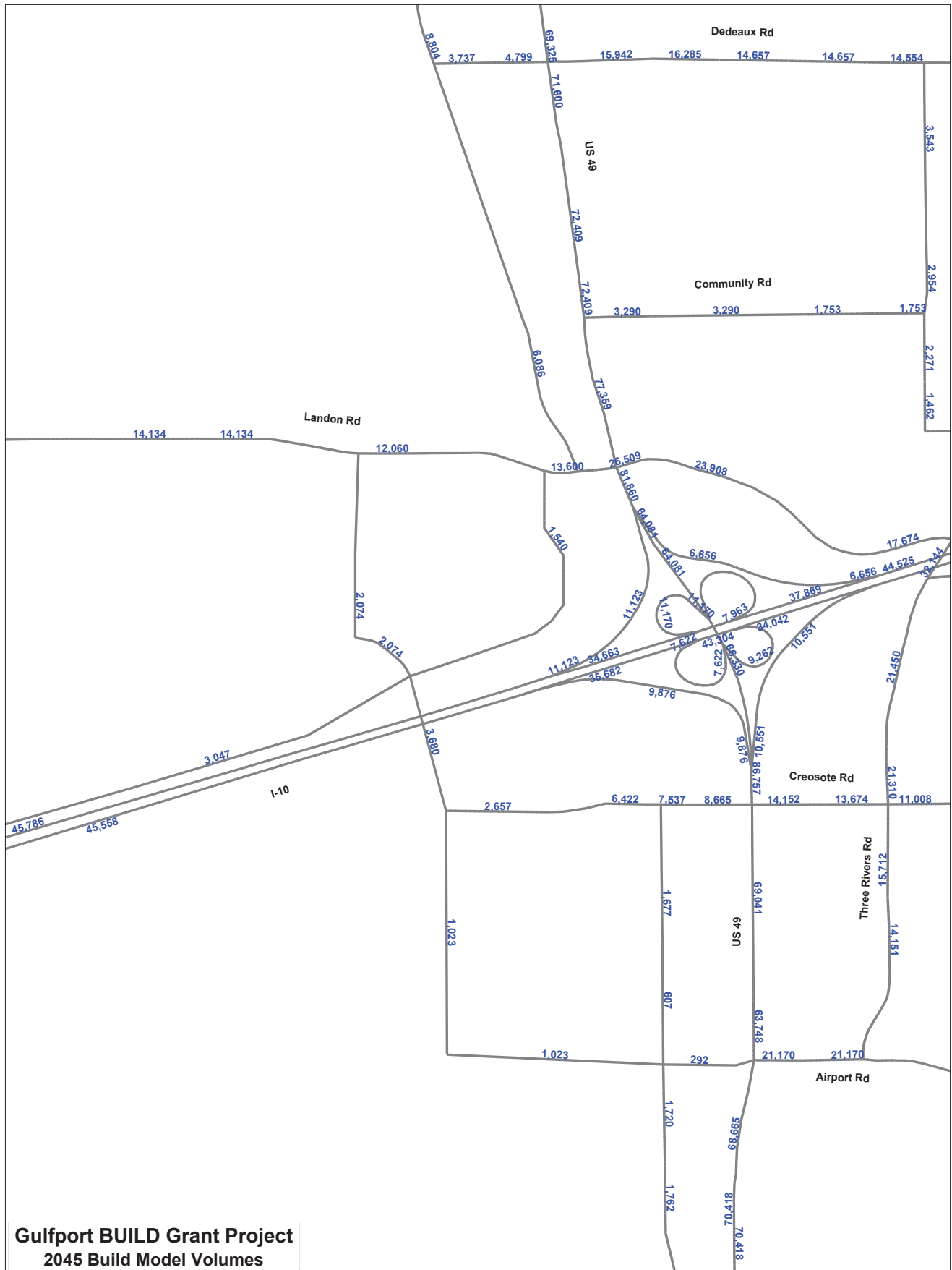
Appendix B

Gulf Regional Planning Commission Traffic Model 2045 No Build



Appendix B

Gulf Regional Planning Commission Traffic Model 2045 Build



Appendix B

City of Gulfport Erosion, Sediment, & Post- Construction Stormwater Control Ordinance

APPENDIX C - EROSION, SEDIMENT, AND POST-CONSTRUCTION CONTROL

ORDINANCE NO. 2419 REVISION TO ORDINANCE NO. 2416

AN ORDINANCE ADOPTING AND ENACTING AN EROSION, SEDIMENT, AND POST-CONSTRUCTION STORMWATER CONTROL TO THE NEW CITY OF GULFPORT, MISSISSIPPI CODE OF ORDINANCES ADOPTED UNDER ORDINANCE NUMBER 1826 THE 5TH DAY OF JANUARY, 1989, TO BE ADDED AS APPENDIX C, EROSION, SEDIMENT, AND POST-CONSTRUCTION CONTROL.

WHEREAS, the Mayor and City Council deems it necessary to reduce the discharge of pollutants, protect water quality, and satisfy applicable water quality requirements of the Clean Water Act;

WHEREAS, the Mayor and City Council has given due consideration to the recommendation of the City of Gulfport reviewing Departments and to the comments, evidence and proceeding adduced and occurring at the public hearing, and has studied and considered the provisions of this ordinance;

WHEREAS, the City of Gulfport is a growing, family-oriented community with a majority of the developed land occupied by residential neighborhoods and a population concerned with quality of life issues;

WHEREAS, the City of Gulfport acknowledges a need to adopt controls to establish minimum stormwater management requirements and controls to protect and safeguard the general health, safety, and welfare of the public residing in watersheds within this jurisdiction;

WHEREAS, the City of Gulfport acknowledges a need to adopt controls to minimize increase in nonpoint source pollution caused by stormwater runoff from development which otherwise degrades local water quality;

WHEREAS, the City of Gulfport acknowledges a need to adopt controls to minimize the annual volume of surface water runoff which flows during and following development to the maximum extent practicable;

WHEREAS, the City of Gulfport acknowledges a need to adopt controls to reduce stormwater runoff rates and volumes, soil erosion and nonpoint source pollution, wherever possible, through stormwater management controls and to ensure that these management controls are properly maintained and pose no threat to public safety;

WHEREAS, the City of Gulfport acknowledges EPA Stormwater Phase II requirements and supports such goals and initiatives;

WHEREAS, the City of Gulfport has the legal authority to institute any appropriate action or proceedings, to correct, or abate such violations;

WHEREAS, the City of Gulfport acknowledges the implementation of "Best Management Practices" as a means to ensure the most effective, economical, and practical way of reducing or preventing polluted runoff is employed;

NOW, THEREFORE, BE IT ORDAINED BY THE MAYOR AND CITY COUNCIL OF THE CITY OF GULFPORT, MISSISSIPPI, AS FOLLOWS:

FOOTNOTE(S):

⁽⁶⁴⁾ **Editor's note**— Ord. No. 2419, §§ 1—11, adopted Jan. 19, 2005, amended Appendix C in its entirety and enacted similar provisions as set out herein. The former Appendix C derived from Ord. No. 2416, §§ 1—11, adopted Dec. 21, 2004.

⁽⁶⁴⁾ The ordinance has been set out substantially as adopted. Obvious misspellings and/or punctuation errors have been corrected without notation. A uniform system of capitalization, citation to state statutes, and expression of numbers in text has been used to conform to the Code of Ordinances. Additions made for clarity are included in brackets [].

- Section 1. - Purpose.

1.1

The purpose of this ordinance is to establish minimum stormwater management requirements and controls to protect and safeguard the general health, safety, and welfare of the public residing in watersheds within this jurisdiction. This ordinance seeks to meet that purpose through the following objectives:

1.1.1 Minimize increase in stormwater runoff from any development in order to reduce siltation, increases in stream temperature, stream bank erosion, and maintain the integrity of stream channels.

1.1.2 Minimize increase in nonpoint source pollution caused by stormwater runoff from development which otherwise degrades local water quality.

1.1.3 Minimize the annual volume of surface water runoff which flows from any specific site during and following development to not exceed the pre-development hydrologic regime to the maximum extent practicable.

1.1.4 Reduce stormwater runoff rates and volumes, soil erosion, and nonpoint source pollution, wherever possible, through stormwater management controls and to ensure that these management controls are properly maintained and pose no threat to public safety.

(Ord. No. 2419, § 1, 1-19-05)

- Section 2. - Definitions.

2.1

General rules: The following general rules shall govern the interpretation of words and phrases used in this ordinance:

2.1.1 The word "person" includes a firm, association, organization, partnership, trust, company or corporation as well as an individual.

2.1.2 The present tense includes the future tense, the singular number includes the plural, and the plural number includes the singular.

2.1.3 The word "shall" is mandatory; the word "may" is permissive.

2.1.4 The words "used or occupied" include the words "intended, designed, or arranged to be used or occupied."

2.2

Words and phrases used in this ordinance are defined as follows for the purpose of this ordinance:

Best management practices means the most effective, economical, and practical way of reducing or preventing polluted runoff.

Building means any structure built or used for the support, shelter, or enclosure of persons, animals, chattels, or moveable property of any kind and which is permanently affixed to the land.

Buffer means a vegetated strip of land to filter runoff and protect from erosion.

Certificate of occupancy or *certificate of completion* means a certificate issued by the building code services division indicating that the building or land in question can be occupied or used. Issuance of a certificate of occupancy or certificate of completion shall not be construed as an approval of a violation of the provisions of the City of Gulfport Code of Ordinances, or a grant of a variance, or waiver of right to enforce a code provision.

Channel means a natural or artificial watercourse with a definite bed and banks that conducts continuously or intermittently flowing water.

Clearing means any activity that removes the vegetative surface cover.

"Cluster duplex" means two (2) or more duplex developments being constructed on a single site or adjacent site by the same developer, owner, or contractor simultaneously.

Dedication means the deliberate appropriation of property by its owner for general public use.

Detention means the temporary storage of stormwater runoff in a stormwater management practice with goals of controlling peak discharge rates and or providing gravity settling of pollutants.

Developer means a person who undertakes land disturbance or development activities.

Development means any man-made changes to improved or unimproved real estate, including but not limited to buildings or other structures, mining, dredging, filling, grading, paving, excavation, or drilling operation.

Discharge means the emission, giving off, or dumping of gases, liquids, or chemicals

Drainage easement means a legal right granted by the landowner to a grantee allowing use of private land for stormwater management purposes.

Drainage way means any channel that conveys surface stormwater runoff.

Erosion control means a measure or activity that prevents erosion.

Erosion and sediment control plan means a stormwater pollution prevention plan for the proposed development indicating the specific measures and sequencing to be used to control sediment and erosion on a development site during and after construction, in accordance with the most recent edition to the Mississippi Department of Environmental Quality (MDEQ) requirements established in the Mississippi Stormwater Pollution Prevention Plan (SWPPP) Guidance Manual for Construction Activities.

Exposed soil areas means all areas of the construction site where the vegetation (trees, shrubs, brush, grasses, etc.) or impervious surface has been removed, thus rendering the soil more prone to erosion. This includes topsoil stockpile areas, borrow areas and disposal areas within the construction site. It does not include temporary stockpiles or surcharge areas of clean sand, gravel, concrete or bituminous, which have less stringent protection. Once soil is exposed, it is considered "exposed soil," until it meets the definition of "final stabilization."

Final stabilization means that all soil disturbing activities at the site have been completed, and that a uniform (evenly distributed, e.g., without large bare areas exceeding 6" X 6" square) perennial vegetative cover with a density of seventy-five (75) percent of the cover for unpaved areas and areas not covered by permanent structures has been established, or equivalent permanent stabilization measures have been employed. Simply sowing grass seed is not considered final stabilization.

Grading means excavation or fill of material, including the resulting conditions thereof.

Hotspot means an area where land use or activities generate highly contaminated runoff, with concentrations of pollutants in excess of those typically found in stormwater.

Impervious coverage means those surfaces that cannot effectively infiltrate rainfall (e.g., building rooftops, pavement, sidewalks, driveways, etc.)

Industrial stormwater permit means a National Pollutant Discharge Elimination System permit issued to a commercial industry or group of industries which regulates the pollutant levels associated with industrial stormwater discharges or specifies on-site pollution control strategies.

Infiltration means the process of percolating stormwater into the subsoil.

Infiltration facility means any structure or device designed to infiltrate water to the subsurface. These facilities may be above grade or below grade.

Jurisdictional wetland means an area of land defined by the United States Army Corps of Engineers under their jurisdiction. Typically it means an area that is inundated or saturated by surface water or groundwater at a frequency and duration sufficient to support a prevalence of vegetation typically adapted for life in saturated soil conditions, commonly known as hydrophytic vegetation.

Land disturbance activity means any activity which changes the volume or peak flow discharge rate of rainfall from the land surface. This may include grading, digging, cutting, scraping, or excavating of soil, placement of fill materials, paving, construction, substantial removal or clearing of vegetation, or any activity which bares soil or rock or involves the diversion or piping of any natural or man-made watercourse.

Nonpoint source pollution means pollution from any source other than from any discernable, confined and discrete conveyances, and shall include, but not be limited to, pollutants from agricultural, silvicultural, mining, construction, subsurface disposal and urban runoff sources.

Off-site facility means a stormwater management measure located outside the subject property boundary described in the permit application for land development activity.

On-site facility means a stormwater management measure located within the subject property boundary described in the permit application for land development activity.

Perimeter control means a barrier that prevents sediment from leaving a site by filtering sediment-laden runoff or diverting it to a sediment trap or basin.

Permit means a permit issued by the City of Gulfport for the construction or alteration of ground within its corporate city limits and does not exempt or supersede the applicant from complying with other federal, state, or local permit requirements.

Permit review committee reviews single-family residential building permits and consists of the building code services division and planning division.

Phasing means clearing a parcel of land in distinct phases, with the stabilization of each phase completed before the clearing of the next.

Post-construction stormwater management plan means the design and use of structural or non-structural practices that are designed to reduce stormwater runoff pollutant loads, discharge volumes, and/or peak flow discharge rates for proposed construction and development. These facilities may or may not require a stormwater maintenance agreement.

Plan review committee is charged with reviewing all building permits for cluster duplex, multi-family, commercial, industrial developments and other large scale subdivision developments, and is comprised of representatives of several City of Gulfport departments or divisions as follows: Public works department (streets and drainage, traffic, water and sewer), engineering department, fire prevention division, planning division, and building code services division.

Recharge means the replenishment of underground water reserves.

Redevelopment means any construction, alteration or improvement requiring a building permit.

Sediment control means measures that prevent eroded sediment from leaving the site.

Site means a parcel of land or a contiguous combination thereof, where grading work is performed as a single unified operation.

Stabilization means the use of practices that prevent exposed soil from eroding.

Start of construction means the first land disturbing activity associated with a development, including land preparation such as clearing, grading, and filling; installation of streets and walkways; excavation for basements, footing, piers, or foundation; erection of temporary forms; and installation of accessory buildings such as garages.

Stop work order means an order issued which requires that all construction activity on a site be stopped.

Stormwater design manual means the most current edition of the Planning and Design Manual for the Control of Erosion, Sediment and Stormwater written by the Mississippi Department of Environmental Quality, Mississippi Soil and Water Conservation Commission and the USDA Natural Resources Conservation Service.

Stormwater maintenance agreement means a document that legally provides for long-term maintenance of stormwater management practices.

SWPPP means a stormwater pollution prevention plan.

Stormwater pollution prevention plan means a document which describes BMPs for construction activities related to erosion and sediment control to be implemented by the owner or operator of a construction site or development, a person, or a business, as outlined in this ordinance, and in accordance with MDEQ guidelines and regulations.

Stormwater retrofit means a stormwater management practice designed for an existing development site that previously had either no stormwater management practice in place or a practice inadequate to meet the stormwater management requirements of the site.

Stormwater runoff means flow on the surface of the ground, resulting from precipitation.

Stormwater treatment practices means measures, either structural or nonstructural, that are determined to be the most effective, practical means for preventing or reducing point source or nonpoint source pollution inputs to stormwater runoff and water bodies.

Watercourse means any natural lake, river, creek, or other natural body of water or channel having definite banks and bed.

Waterway means a channel that directs surface runoff to a watercourse or to the public storm drain.

(Ord. No. 2419, § 1, 1-19-05)

- Section 3. - Permits.

3.1

Permit for land disturbance.

3.1.1 To serve the public interest by controlling non-points source pollution, no land owner or land operator shall be issued any building permit for land disturbance activities without first meeting the requirements of federal, state, and local codes.

3.1.2 Notwithstanding any other provisions of this ordinance, any proposed construction or development project that results in an additional or added twenty thousand (20,000) square feet of impervious area will be required to obtain a permit in accordance with section [3.5](#) of this ordinance.

3.2

Exceptions to land disturbance permit.

3.2.1 Any emergency activity that is immediately necessary for the protection of life, property, or natural resources.

3.2.2 Existing nursery, forestry, logging or agricultural operations conducted as a permitted main or accessory use and is so recognized by the City of Gulfport Engineering Department as such.

3.2.2.1 A list of such activities shall be maintained by the engineering department.

3.3

Activities not requiring a permit from the City of Gulfport but are subject to fines for noncompliance.

3.3.1 Clearing of land with a land disturbance of less than ten thousand (10,000) square feet in area shall not require a permit but shall follow best management practices.

3.3.2 The transportation of soil or fill.

3.3.2.1 Such material shall be covered and protected to ensure debris is not distributed to the environment.

3.3.3 The transportation of items other than soil and fill.

3.3.3.1 All materials in transit shall be secured to ensure no debris or chemicals are distributed into the environment which affects the City of Gulfport stormwater.

3.3.4 Landscaping.

3.3.4.1 The preparation for or placement of sod or use of other planting materials less than a total of ten thousand (10,000) square feet does not require a permit. Any amount of soil disruption over this amount and under five (5) acres shall submit plans in accordance with this ordinance to building code services division. If the land disturbance is less than one (1) acre, the permit shall comply with section [3.4](#). Land disturbances over one (1) acre shall comply with section [3.6](#).

3.3.5 Stabilization requirements.

3.3.5.1 Permanent vegetation shall be seeded or planted within thirty (30) days after the final grade is reached. Planting guidance for permanent vegetative practices is included in [chapter 5](#) of the Stormwater Design Manual.

3.3.5.2 Any area of revegetation must exhibit a survival of a minimum of seventy-five (75) percent of the crop cover throughout the year immediately following revegetation and shall not be allowed to have bare areas exceeding 6" X 6" square. Revegetation shall be repeated in successive years until the minimum seventy-five (75) [percent] survival for one (1) year is achieved and no bare areas exceed 6"X6" square.

3.4

Permit application requirements for single-family residences, single duplex, accessory use activities or additions requiring a permit on sites disturbing less than five (5) acres.

3.4.1 The total amount of area to be disturbed by the proposed construction.

3.4.2 An explanation of the type of fill to be used and how the proposal fill will affect the drainage along with a diagram showing the existing and projected change to the current land configuration.

3.4.3 A drainage plan showing the existing drainage features and proposed changes.

3.4.4 A copy of the erosion and sediment control plan for the proposed development, in accordance with the most recent edition of the Mississippi Department of Environmental Quality (MDEQ) requirements established in the Mississippi Stormwater Pollution Prevention Plan (SWPPP) Guidance Manual for Construction Activities. The plan shall meet with the specifications for small construction from one (1) to five (5) acres. (MDEQ does not typically require SWPPPs for such development to be reviewed by their agency.)

3.4.5 If the development disturbs one (1) acre or more, or disturbs less than one (1) acre but is part of a larger common plan of development or sale that disturbs one (1) acre or more, a copy of the post-construction stormwater management plan must be submitted and must comply with sections 6 and 7 of this ordinance.

3.4.6 Submittal of these plans does not require the signature of a licensed contractor, engineer, or certified professional in erosion and sediment control and may be submitted by a layperson.

3.5

Application requirements for cluster development of duplexes, town homes, multi-family complexes, commercial activities and industrial activities on sites disturbing less than one (1) acre.

3.5.1 Identification and delineation of all landscaped areas and buffer planting strips for the building site. A copy of the tree permit shall be attached if a tree permit is required for the site.

3.5.2 The total amount of area to be disturbed by the proposed construction.

3.5.3 An explanation of the type of fill to be used and how the proposal will affect the drainage along with a diagram showing the existing and projected change to the current land configuration.

3.5.4 A copy of the erosion and sediment control plan for the proposed development in accordance with the Mississippi Department of Environmental Quality (MDEQ) requirements established in the Mississippi Stormwater Pollution Prevention Plan (SWPPP) Guidance Manual for Construction Activities. The plan shall meet with the specifications for small construction from one (1) to five (5) acres. (MDEQ does not typically require SWPPPs for such development to be reviewed by their agency.)

3.5.4.1 This plan shall include a compliance statement agreeing that any land clearing construction, development, or transportation involving the movement of earth shall be in accordance with federal, state, local laws and as submitted in subject plan.

3.5.5 If the development is less than 1 (one) acre but is part of a larger common plan of development or sale that disturbs one (1) acre or more, a copy of the post-construction stormwater management plan must be submitted and must comply with sections 6 and 7 of this ordinance.

3.5.6 Submittal of these plans does not require the signature of a licensed contractor, engineer, or certified professional in erosion and sediment control and may be submitted by a layperson.

3.6

Application requirements for cluster duplex on single or multiple sites, town homes, multi-family complexes, commercial activities and industrial activities on sites disturbing one (1) acre or more.

3.6.1 Landowners proposing the development or re-development of one (1) or more acres shall submit and receive a permit from the City of Gulfport for the disturbance of land. With this submission the following elements shall be included: A copy of the erosion and sediment control plan, notice of intent, and post-construction stormwater plan in accordance with sections 5, 6, and 7 of this ordinance.

3.6.1.1 A licensed contractor, engineer, or certified professional in erosion and sediment control shall develop the plan and shall be responsible for construction, fill and grading activities.

3.6.2 All required federal, state, and local permits shall be applied for and received prior to requesting a building permit.

3.6.3 The owner or operator shall inspect all drainage facilities while under construction. When facilities are not constructed according to approved plans, the city engineer, public works director or building official shall have authority to compel compliance and have any situations corrected which are not according to the approved plans. All drainage facilities located on private property shall be accessible at all times for inspection by city personnel.

3.6.4 Certification by the owner or operator that projects were built as permitted shall be provided upon completion of final grading.

3.6.5 As-built plans will be required for any drainage facility that is proposed to be maintained by the city as part of the stormwater maintenance agreement for the project or development. As-built plans shall be submitted in a paper and electronic format. Two (2) copies of each shall be provided to the building code services division for distribution. Electronic copies shall be in format compatible with the city's mapping program. Paper copies shall be stamped and signed by a professional engineer. As-built plans shall show the final grades, elevation and locations of all structures and utilities, drainage features, and final design specifications for all construction and stormwater management facilities to be maintained by the city.

3.7

Required attendant items in common to all development within the City of Gulfport for building, grading, or construction permit.

3.7.1 When a consulting firm is retained by the applicant, the name of the applicant's principal contact at such firm.

3.7.2 If the development is to be performed in phases, a notice of intent with expected development dates shall be provided.

(Ord. No. 2419, § 1, 1-19-05)

- Section 4. - Review and approval.

4.1

Application procedure.

4.1.1 A complete permit application as listed herein for land disturbance activity shall be filed with building code services division on any regular business day. The building official shall transmit the request to the appropriate review departments.

4.1.2. Application for the construction of a single-family residence, a single duplex, or other accessory use activity which requires a permit on subject sites shall be reviewed by the building code services division and the planning division. The building official will act on all applications within seven (7) working days after the applicant has fully complied with provisions of this ordinance. The building official shall either issue a permit or notify the applicant in writing of the reasons for the refusal.

4.1.3 Application for all other type of development shall be reviewed by the site plan review committee within ten (10) working days of receiving a complete application. The site plan review committee shall act to approve, disapprove, or approve with conditions the site plan application.

4.1.3.1 If any of the plans required herein are incomplete, the building official shall send notification of required items to the applicant. All time is suspended until the requested information is provided. The time period for review shall start over when the application is completed. If an application is disapproved, the applicant may revise those items not in compliance and amend the application. If additional information is submitted, the site plan review committee shall have ten (10) working days from the date the additional information was received to inform the applicant that the plan is either approved or disapproved.

4.1.4 Permit requests requiring a stormwater maintenance agreement shall have any required maintenance easement or right of access agreement in place and documented as part of the post-construction stormwater management plan prior to issuance of a certificate of occupancy or certificate of completion. The owner of the site shall be responsible for maintaining overall

responsibility of the stormwater site and shall execute any required maintenance agreement that shall be binding on all subsequent owners of land served by the stormwater management facility.

(Ord. No. 2419, § 1, 1-19-05)

- Section 5. - Erosion and sediment control plan.

5.1

Erosion and sediment control plans shall be developed in accordance with the Stormwater Design Manual and the SWPPP Guidance Manual for Construction Activities. These documents contain an outline of elements to be included in an erosion and sediment control plan, commonly referred to as an SWPPP, and provides a sample plan.

(Ord. No. 2419, § 1, 1-19-05)

- Section 6. - Design and protection requirements for new developments or re-developments requiring a post-construction stormwater management plan.

6.1

Grading, erosion control practices, sediment control practices and waterway crossings shall meet the design criteria set forth in the most recent version of the Stormwater Design Manual. All sites shall establish stormwater management practices to control the peak flow rates of stormwater discharge associated with specified design storms and reduce the generation of stormwater for the site to provide treatment for both water quality and quantity.

6.1.1 Fill slopes shall be no greater than 3:1, except as approved by the building code services division or engineering department to meet other community or environmental objectives.

6.2

Clearing and grading of natural resources, such as forests and wetlands, shall be permitted only when in compliance with all other sections of this Code. Clearing techniques that retain natural vegetation and drainage patterns, as described in the Stormwater Design Manual, shall be used to the satisfaction of the building code services division or engineering department.

6.3

No clearing shall begin until approved sediment control devices are in place and operable according to Stormwater Design Manual.

6.4

Phasing is the preferred method and will be encouraged to be adopted on larger sites. A plan and drawing showing such practices shall be submitted.

6.5

Erosion control requirements shall include the following:

6.5.1 Soil stabilization shall be completed as soon as practical but not later than five (5) days after clearing or inactivity in construction. The city engineer, public works director, or building official may shorten this time frame based on projected weather conditions.

6.5.2 If seeding or another vegetative erosion control method is used, it shall become established within two (2) weeks and the building official or city engineer may require the site have another method in place until the soil is stabilized.

6.5.3 Special techniques that meet the design criteria outline in the Stormwater Design Manual on steep slopes or in drainage ways shall be used to ensure stabilization.

6.5.4 Soil stockpiles or similar materials shall be stabilized or covered at the end of each workday.

6.5.5 The entire site shall be stabilized to control erosion at the close of construction for any prolonged periods in excess of forty-eight (48) hours.

6.5.6 Techniques shall be employed to prevent blowing of dust or sediment from the site.

6.5.7 Techniques that divert upland runoff past disturbed slopes shall be employed.

6.5.8 The use of techniques to prevent erosion and sedimentation from entering public roads or other areas including ditches, storm drains, and other drainage facilities.

6.6

Sediment control requirements include any of, or a combination of the following:

6.6.1 Settling basins, sediment traps, or tanks and perimeter controls.

6.6.2 Settling basins that are designed in a manner that allows adaptation to provide long-term stormwater management, when necessary or required by building code services division or the engineering department.

6.6.3 Protection for adjacent properties by the use of a vegetated buffer strip where practical and the use of perimeter controls.

6.7

Waterway and watercourse protection when required shall include:

6.7.1 A temporary stream crossing installed by the contractor and approved by the engineering department.

6.7.2 Stabilization of the watercourse channel before, during and after any in-channel work.

6.7.3 All on-site stormwater conveyance channels designed according to the criteria outlined in the Stormwater Design Manual.

6.7.4 Stabilization adequate to prevent erosion located at the outlets of all pipes and paved channels.

6.8

Construction site access requirements shall include a temporary access road and other measures required by building code services division or the engineering department in order to ensure that sediment is not tracked onto public rights-of-way by construction vehicles or washed into storm drains.

6.9

Work in or around natural wetlands should be consistent with the requirements outlined in the Coastal Wetlands Protection Act, The Clean Water Act, and all other federal and state requirements regarding wetlands. For new development or re-development, structural and non-structural stormwater treatment practices shall be designed to treat runoff, where required by MDEQ regulations.

6.9.1 To protect stream channels from degradation, appropriate channel protection shall be utilized.

6.9.2 Stormwater discharges to critical areas with sensitive resources (including shellfish beds, recreational areas, water supply reservoirs and groundwater recharge areas) are subject to additional performance criteria, or may need to utilize or restrict certain stormwater management practices.

6.9.3 Stormwater discharges from land uses or activities with higher potential pollutant loadings, known as "hotspots," may require the use of specific structural and pollution prevention practices. Such sites shall be identified on plans upon submission of a construction, grading or building permit application.

6.10

Stormwater maintenance agreements.

6.10.1 A legally binding covenant specifying the parties responsible for the proper operation and maintenance for all stormwater management facilities after construction is complete shall be

included in the post-construction stormwater management plan and secured prior to issuance for any permits for land disturbance activities.

6.10.2 Enforceable operations and maintenance agreements are required to ensure the system will function as designed during and after construction. The maintenance agreements will include any and all maintenance easements required to access and inspect the stormwater treatment practices, and to perform routine maintenance as necessary to ensure proper functioning of the stormwater treatment practices. The parties responsible for the documented SWPPP BMPs shall make records of the installation, maintenance and repairs on the facility and shall retain these records for at least five (5) years. These records shall be provided to the city engineer annually by January 15 of each calendar year and during inspection of the facility or upon request.

6.10.3 Failure of the owner or operator to maintain the premises shall be cause for the city to take action and to remedy the violation. If the owner fails to perform the maintenance, the City of Gulfport may complete the work with the owner responsible for all costs.

(Ord. No. 2419, § 1, 1-19-05)

- Section 7. - Basin stormwater management design criteria.

7.1

Minimum control requirements. Projects shall be designed for the twenty-five (25) year frequency storm event. Peak discharge rates for fifty (50) and one hundred (100) year frequency storm events shall be calculated and the effect of these storms on the stormwater system shown. This shall be submitted as part of the permit application.

7.2

[Additional requirements possible.] In addition, if hydrologic or topographic conditions warrant greater control than that provided by the minimum control requirements, the City of Gulfport reserves the right to impose any or all additional requirements deemed necessary to control stormwater flowing from the site or development.

7.3

Site design feasibility.

7.3.1 Applicants shall consider the following conditions of the site when they determine the types of practices they will use to control stormwater on the site: topography, the drainage area, depth of the water table, soils, slopes, terrain, and the location of environmentally sensitive areas located on site.

7.3.2 The stormwater management plan shall be designed to remove pollutants and reduce flow velocities, shall utilize an acceptable water quality pre-treatment BMP and shall capture and treat

stormwater in areas designated as wetlands, in accordance to specifications defined in the Stormwater Design Manual.

7.3.3 For any structural practice proposed, a landscape plan which affords stabilization of the areas adjacent to the practice will be required.

(Ord. No. 2419, § 1, 1-19-05)

- Section 8. - Construction inspection.

8.1

The applicant shall notify the building code services division in advance before the commencement of construction.

8.2

On-site inspections shall be conducted by building code services division or the engineering department who shall inspect the work and notify the permittee wherein the work fails to comply with the erosion and sediment control plan as approved.

8.2.1 Plans for grading, stripping, excavating, and filling work bearing the stamp of approval of the building official or city engineer shall be maintained at the site during the progress of the work. To obtain required inspections, the permittee shall notify the city as follows:

8.2.1.1 Two (2) days before the start of construction.

8.2.1.2 Upon completion of site clearing.

8.2.1.3 Upon completion of rough grading.

8.2.1.4 Upon completion of final grading.

8.2.1.5 Upon completion of final landscaping.

8.2.2 The city engineer or public works director shall act as designated agent and inspector for all construction done by their employees. All contract work done for the city shall be the responsibility of the contractor and shall comply with the provisions herein.

8.3

The city maintains the right to enter the property of the applicant as deemed necessary to make inspection and to ensure compliance.

(Ord. No. 2419, § 1, 1-19-05)

- Section 9. - Enforcement.

9.1

[Inspections.] All drainage facilities located on private property, whether dedicated to the city or not, shall be accessible at all times for inspection.

9.2

Violations. No person shall construct, enlarge, alter, repair or maintain any grading, excavation, or fill or cause the same to be done, contrary to or in violation of any of the terms of this ordinance, or any state or federal laws in effect regulating stormwater runoff. Any person adjudicated to be in violation of any of the terms and provisions thereof shall be guilty of a misdemeanor and subject to a fine for the first offense not to exceed two hundred fifty dollars (\$250.00) or thirty (30) days in jail or both. For each day that such violation remains unresolved after the first day that the offense occurred, and if the court finds that reasonable action has not been taken by the defendant to correct the violation, it shall be treated as a separate and subsequent offense each day punishable by a fine not to exceed five hundred dollars (\$500.00) or ninety (90) days in jail or both.

9.2.1 All violations of this ordinance are hereby declared to be offenses against the city requiring actions to preserve the good order and peace and to prevent injury to, destruction of, or interference with the public or private property. The building official and the public works director, or their designated enforcement officers shall be hereby vested with authority to investigate and inspect for violations of this ordinance, and to process and issue citations for such misdemeanors in the manner provided by law and in accordance with instructions of the chief of police, a municipal court prosecuting attorney, or the procedures established by the municipal court.

9.2.2 If the building official or public works director, or their designated enforcement officer finds evidence to support a violation of this ordinance, the developer, or other person (i.e. Landowner) found to be responsible for such violation shall be given notice in writing of the violation indicating the nature and location of the violation and ordering action determined by the official to be necessary to correct it. Among the actions that may be ordered is a discontinuance of any actions on site. In such case, if the official deems a need for assistance to fulfill his duties, he may call upon the chief of police to furnish police assistance.hg;ol0; 9.3 *Stop work order.* Any person holding a site development permit pursuant to this ordinance who violates the terms of the permit or implements site development in a manner that is a cause or threat to cause a material adverse affect on the health, welfare or safety of persons residing or working in the neighborhood or development site or a threat of detriment to the public welfare or a threat or of irreparable damage to property or improvements in the neighborhood, the building official, public works director, or city engineer may institute in behalf of the city legal process in law or equity for an injunction, writ of mandamus or other appropriate remedy to prevent or prohibit violation of any provision of this ordinance. If the city finds that immediate action is necessary, it may take action first to correct the problem or imminent threat, and then notify the developer, landowner, or contractor responsible who shall be liable civilly to city for reasonable

costs of corrective services.hg;ol0; 9.4 *Restoration of lands*. Violators may be required to restore land to its undisturbed condition. In the event, after written notice is given, restoration is not undertaken within a reasonable time, the city by official act of the mayor and city council may take corrective action, and hold the violator liable as a civil debt for the reasonable costs thereof.

(Ord. No. 2419, § 1, 1-19-05)

- Section 10. - Separability.

10.1

Separability. Should any section or provision of this ordinance be declared by the court to be unconstitutional or invalid, such decision shall not affect the validity of the ordinance as a whole, or of any part hereof, other than the part so declared to be unconstitutional or invalid, and the remainder of this ordinance shall remain in full force and effect.

(Ord. No. 2419, § 1, 1-19-05)

- Section 11. - [Implementation and review.]

This ordinance shall be in full force and published according to law and shall be spread on the minutes of the Gulfport City Council as specified:

11.1

Implementation. This ordinance shall be made available for inspection and disseminated to all land owners applying for building permits involving land disturbance activities from and after the effective date hereof. Permit applications and approval shall be required under this ordinance on and after June 1, 2005, when the ordinance shall be fully implemented.

11.2

Review. The delay in implementation of the ordinance shall provide a period for builders and developers to become acclimated to the procedures and requirements hereof. Prior to the effective date of implementation on June 1, 2005, this ordinance shall be subject to comment, and final review and revision by the governing authority.

(Ord. No. 2419, § 1, 1-19-05)